

MOUNTAIN VIEW APARTMENTS - PHASE II

2373 MAIN STREET

SITUATE IN A PORTION OF THE NE 1/4, NW 1/4 OF SECTION 30, T. 39 N., R. 2 E., W.M.
CITY OF FERNDALE, WHATCOM COUNTY, WASHINGTON

LEGEND

- = FND BRASS MON
- = FND ALUMINUM CAP MON
- = FND CONC MON
- = FND P.I. MON
- = FND REBAR AND CAP
- = SET 1/2" REBAR W/PLAS. CAP PLS#????
- = FND IRON PIPE
- = FND HUB AND TACK
- = FND PK NAIL
- = FND PK NAIL AND TAG/SHINER
- = FND RR SPIKE
- = RECORD DATA PER DEED
- = RECORD DATA PER PLAT
- = EXIST SD CATCH BASIN (TYPE 1)
- = EXIST SD CATCH BASIN (TYPE 2)
- = EXISTING SD MANHOLE (TYPE 1) (SOLID TOP)
- = EXISTING SD MANHOLE (TYPE 2) (SOLID TOP)
- = EXIST SD INLET
- = EXIST SD AREA DRAIN
- = EXIST SD CLEANOUT
- = EXIST SD CONTROL STRUCTURE
- = EXIST SD WIER
- = EXIST SD SERVICE
- = PROPOSED STORM DRAIN SERVICE
- = PROPOSED STORM DRAIN CLEANOUT
- = PROPOSED STORM DRAIN CATCH BASIN
- = PROPOSED STORM DRAIN MANHOLE (TYPE 2)
- = PROPOSED STORM DRAIN VAULT
- = EXIST SANITARY SEWER MANHOLE
- = EXIST SANITARY SEWER CLEANOUT
- = EXIST SANITARY SEWER SERVICE
- = PROPOSED SANITARY SEWER SERVICE
- = PROPOSED SEWER CLEANOUT
- = PROPOSED SEWER MANHOLE
- = EXISTING WATER SERVICE CONNECT
- = EXISTING FIRE STAND PIPE
- = EXISTING FIRE HOSE CONNECTION
- = EXISTING WATER BLOW-OFF VALVE
- = EXISTING WATER METER BOX
- = EXISTING WATER VALVE
- = EXISTING FIRE HYDRANT
- = EXIST WATER VALVE BOXES
- = EXIST POWER/AND OR UTILITY POLE
- = EXIST GUY POLE
- = EXIST GUY WIRE
- = EXIST POWER METER/STRUCTURE
- = EXIST POWER VAULT
- = EXIST POWER JBOX/HANDHOLD
- = EXIST LIGHT POLE & BOX
- = EXIST UTILITY POLE
- = EXIST TV BOX
- = EXIST TELEPHONE PEDESTAL
- = EXIST TELEPHONE MANHOLE
- = EXIST MAIL BOX
- = EXIST SIGN
- = EXIST FLAG POLE
- = EXIST LANDSCAPING
- = EXIST VEGETATION LINE
- = SOIL REPORT TEST PIT EXPLORATION & #
- = EXIST GAS METER

- = EXIST FIBER OPTIC LINE
- = EXIST OVERHEAD POWER
- = EXIST UNDERGROUND POWER
- = EXIST OVERHEAD PHONE
- = EXIST UNDERGROUND PHONE
- = EXIST OVERHEAD UTILITIES (UNKNOWN)
- = EXIST UNDERGROUND TV CABLE
- = EXIST GAS MAIN
- = EXIST WATER LINE
- = EXIST WATER LINE
- = EXIST SANITARY SEWER LINE
- = EXIST SANITARY SEWER LINE
- = EXIST STORM DRAIN LINE
- = EXIST STORM DRAIN LINE
- = EXIST CHAIN LINK FENCE
- = PROPOSED CHAIN LINK FENCE
- = EXIST FENCE
- = PROPOSED FENCE
- = EXIST TOP OF SLOPE
- = PROPOSED TOP OF SLOPE
- = EXIST TOE OF SLOPE
- = PROPOSED TOE OF SLOPE
- = PROPOSED CONC. BLOCK RET. WALL
- = EXIST CONTOUR (INDEX)
- = EXIST CONTOUR (NORMAL)
- = PROPOSED STORM DRAIN LINE
- = PROPOSED SAN. SEWER LINE
- = PROPOSED WATER LINE
- = PROPOSED GAS LINE
- = PROPOSED RIP-RAP
- = PROPOSED ROOF DRAIN
- = PROPOSED POWER VAULT
- = PROPOSED STOP SIGN
- = PROPOSED ORNAMENTAL TYPE STREET LIGHT
- = PROPOSED SINGLE SHOEBOX TYPE STREET LIGHT
- = PROPOSED DOUBLE SHOEBOX TYPE STREET LIGHT
- = PROPOSED LIGHT POLE LUMINAIRE W/DROP
- = PROPOSED LIGHT POLE LUMINAIRE W/2 LIGHTS
- = PROPOSED LIGHT POLE LUMINAIRE W/1 LIGHT
- = EXIST SPOT ELEV @ TOP OF PAVEMENT
- = EXIST SPOT ELEV @ EDGE OF PAVEMENT
- = EXIST SPOT ELEV @ EDGE OF CONC WALK
- = EXIST SPOT ELEV @ TOP OF GROUND
- = EXIST SPOT ELEV @ EDGE OF GRAVEL
- = EXIST SPOT ELEV @ FACE OF CURB
- = EXIST SPOT ELEV @ TOP BACK OF SIDEWALK
- = EXIST SPOT ELEV @ TOP OF CONC WALK OR WALL
- = DETAIL CALLOUT
- = PROPOSED SPOT ELEV @ TOP OF SIDEWALK
- = PROPOSED SPOT ELEV @ TOP OF PAVEMENT
- = PROPOSED SPOT ELEV @ TOP OF CURB
- = PROPOSED SPOT ELEV @ TOP OF FINISHED GRADE
- = EXISTING WETLAND

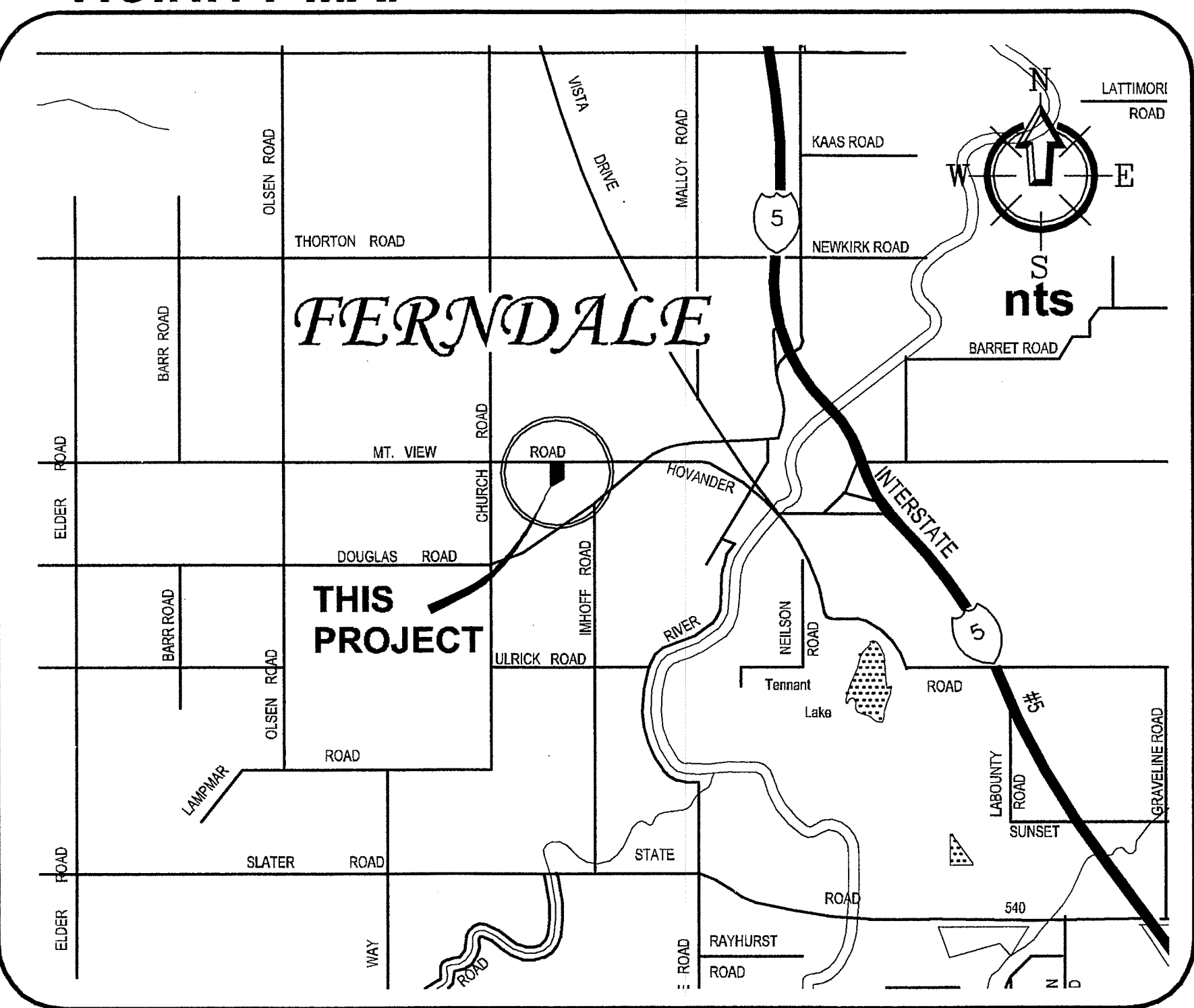
SHEET INDEX

- C1) COVER SHEET
- C2) TEMPORARY EROSION & SEDIMENTATION CONTROL PLAN
- C3) STORMWATER SITE PLAN
- C4) RAIN GARDEN GRADING & PLANTING PLAN
- C5) STORMWATER & PAVEMENT DETAILS
- C6) WATER & SANITARY SEWER PLAN
- C7) WATER & SANITARY SEWER DETAILS

ABBREVIATIONS

- WL = WATER LINE
- PVC = POLY VINYL CHLORIDE
- D.I. = DUCTILE IRON
- LF = LINEAR FEET
- FH/F.HYD. = FIRE HYDRANT
- MJ = MECHANICAL JOINT
- FL = FLANGE/FLOWLINE
- BO = BLOWOFF ASSEMBLY
- CPLG = COUPLING
- ADAPT = ADAPTER
- L/LT = LEFT
- R/RT = RIGHT
- TYP = TYPICAL
- EX, EXST = EXISTING
- EXIST = EXISTING
- CL/C.L. = CENTERLINE
- FF/FFE = FINISH FLOOR
- EP, EOP = EDGE OF PAVING
- EL, ELEV = ELEVATION
- FGE/FG = FINISHED GRADE ELEVATION
- RAD = RADIUS
- R = RADIUS OR RIGHT
- L = LENGTH OR LEFT
- HDPE = HIGH DENSITY POLYETHYLENE
- SCH. = SCHEDULE
- SMMWW = STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.
- SF = SILT FENCE
- WSDOE = WASHINGTON STATE DEPARTMENT OF ECOLOGY
- C.O.F./COF = CITY OF FERNDALE
- SW = SIDEWALK
- CR = CURVE RETURN
- IE = INVERT ELEVATION
- INV = INVERT
- SSCO = SANITARY SEWER CLEANOUT
- SSMH = SANITARY SEWER MANHOLE
- EG = EXISTING GRADE
- STA = STATION
- AF NO. = AUDITORS FILE NUMBER
- ALIGN = ALIGNMENT
- RW/ROW = RIGHT OF WAY
- TR = TRACT EASEMENT LINE
- MB = MAIL BOX
- UTIL = UTILITY
- REQ = REQUIRED
- LOC = LOCATION
- APPROX = APPROXIMATE
- CONC = CONCRETE
- PLNTR = PLANTER
- WLK = WALKWAY
- FLD = FIELD
- PC = POINT OF CURVE
- PT = POINT OF TANGENCY
- TYP./TYP = TYPICAL
- SDCB = STORM DRAIN CATCH BASIN
- SDMH = STORM DRAIN MANHOLE
- FM = SANITARY FORCE MAIN
- MH = MANHOLE
- SS = SANITARY SEWER
- SD = STORM DRAIN
- Δ = DELTA ANGLE
- POC = POINT ON CURVE
- PRC = POINT OF REVERSE CURVE
- PCC = POINT OF COMPOUND CURVE
- ASB = AS-BUILT

VICINITY MAP



PROJECT CONTACTS

OWNER

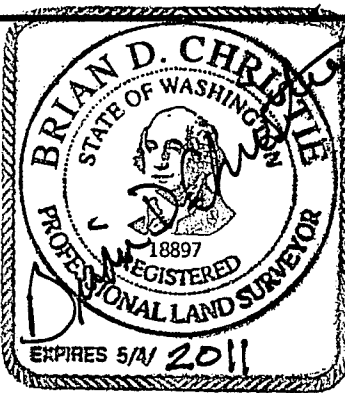
MOUNTAIN VIEW RDM, LLC
CONTACT PERSON: DANNY FINKELSTIEN
910 HARRIS STREET, UNIT 502
BELLINGHAM, WA, 98225
PHONE: (360) 354-0333
FAX: (360) 354-7022

SURVEYOR

CHRISTIE AND CHRISTIE LAND SURVEYING, INC.
BRIAN CHRISTIE, PLS
22 GRAND AVE, SUITE D
BELLINGHAM, WA 98225
(360) 671-8855
(360) 671-8823 (FAX)

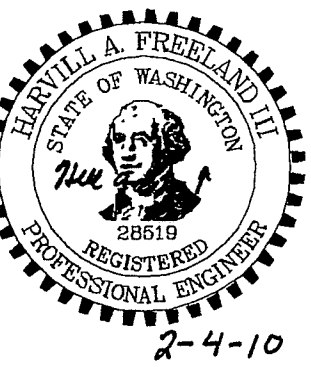
CIVIL ENGINEER

FREELAND & ASSOCIATES, INC.
TONY FREELAND, PE
220 W. CHAMPION ST., STE. 290
BELLINGHAM, WA 98225
(360) 650-1408
(360) 650-1401 (FAX)



SURVEYOR'S CERTIFICATION:
"I CERTIFY THAT ON 9-10-2009 A FIELD AS-BUILT SURVEY WAS PERFORMED AT _____ BY ME OR UNDER MY DIRECTION AND THAT DATA FROM THAT FIELD SURVEY INCLUDING LOCATION SHOTS, INVERT MEASUREMENTS AND FIELD NOTES WERE SUPPLIED TO THE CIVIL ENGINEER OF RECORD FOR THEIR PREPARATION OF THESE AS-BUILT PLANS.
SAID FIELD SURVEY WORK MEETS OR EXCEEDS THE MINIMUM SURVEY STANDARDS AS PER WAC 332.130.090."
By: Brian D. Christie Date: 2-4-2010

ENGINEER'S CERTIFICATION:
"I HEREBY CERTIFY THAT THE IMPROVEMENTS FOR THE MOUNTAIN VIEW APARTMENTS HAVE BEEN INSPECTED BY FREELAND & 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."
By: Tony Freeland Date: 2-4-10



CITY OF FERNDALE PROJECT #DVLP 2006-14

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

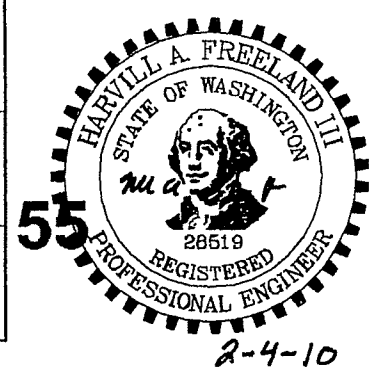
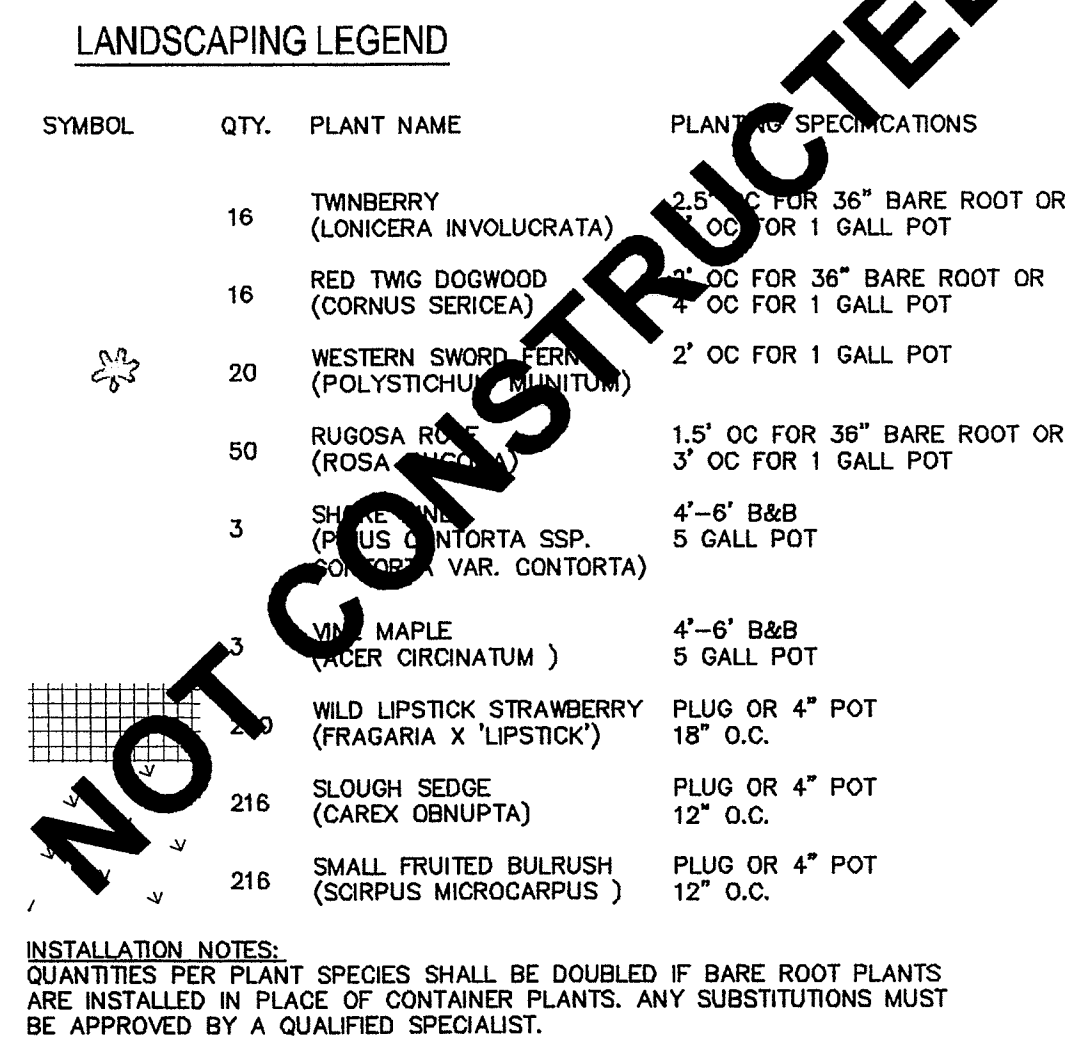
05097ASB4.dwg

AS-BUILT PLANS

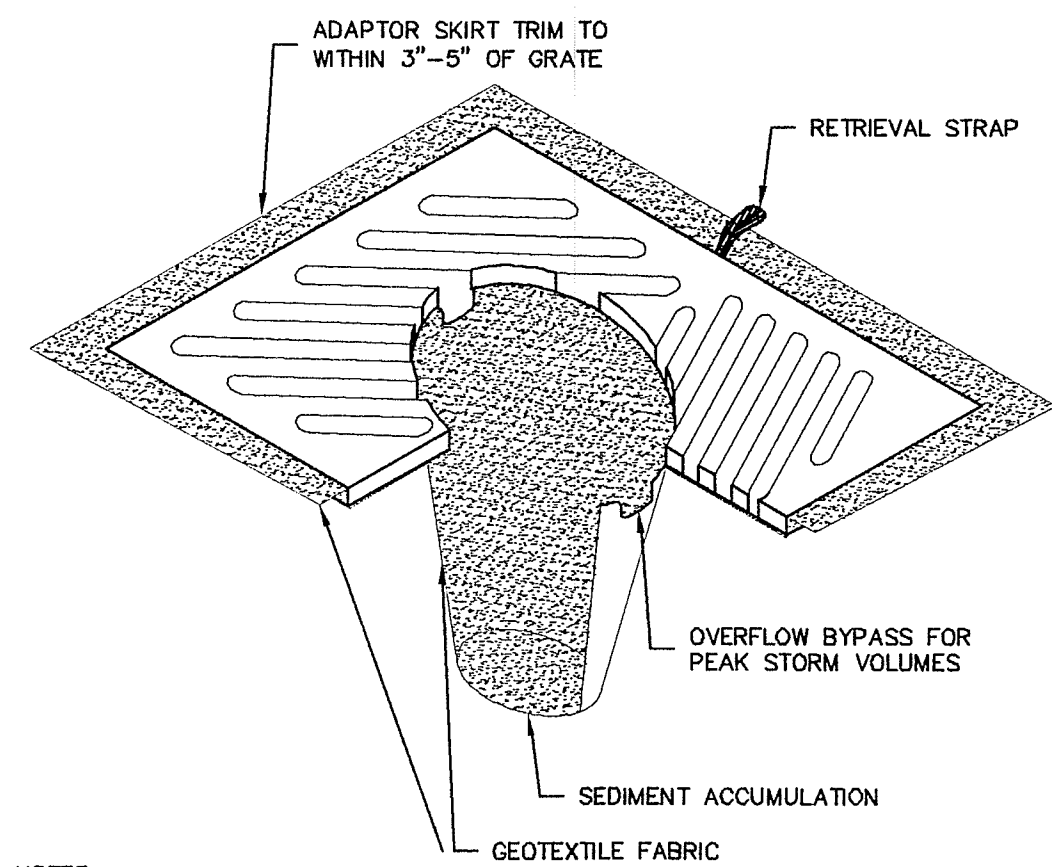
220 W. Champion Street, Ste. 290
Bellingham, WA 98225
t: 360.650.1408
f: 360.650.1401
DATE: 09-28-09
JOB #: 05097
SHEET: C1



FREELAND & ASSOCIATES

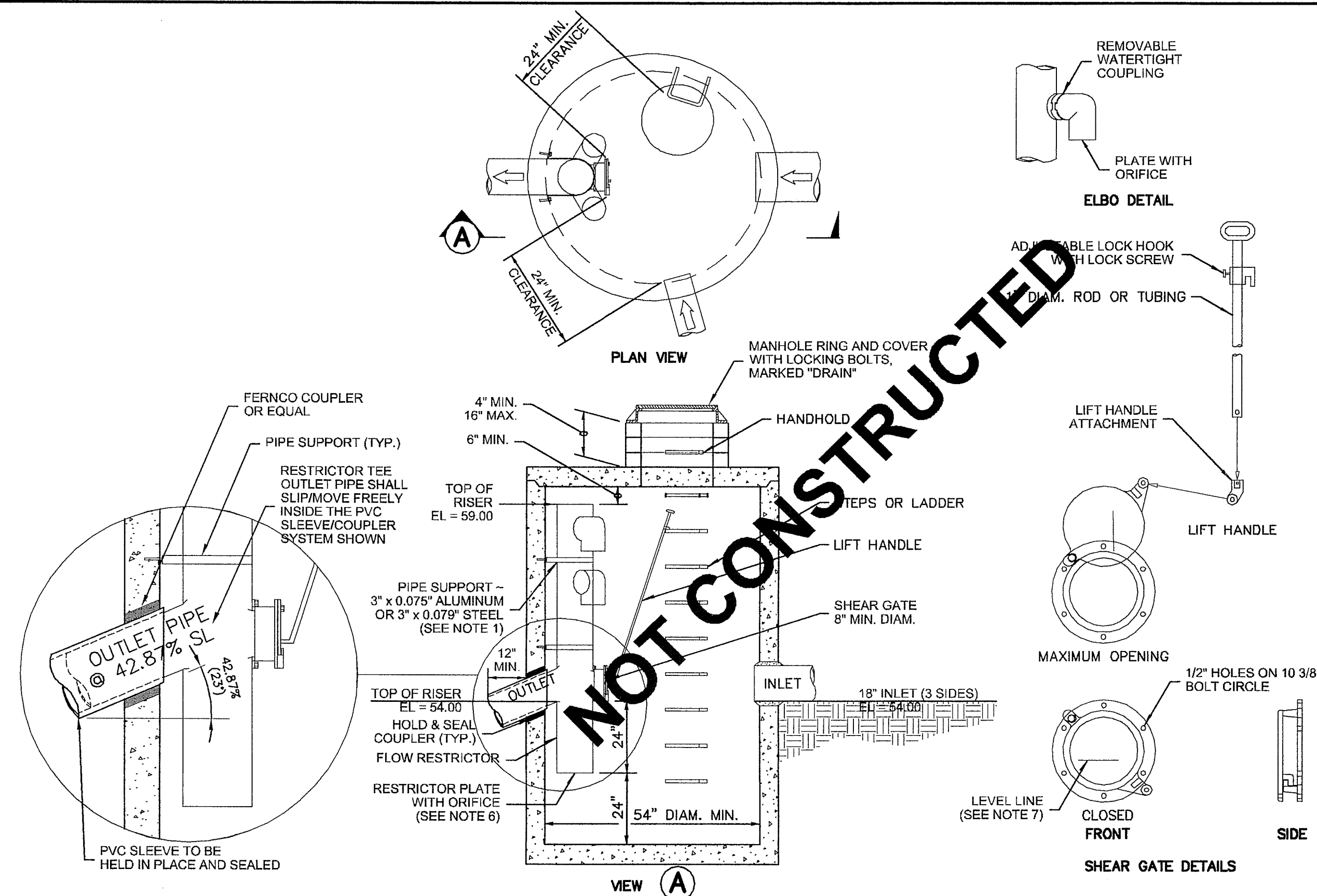


DWG #:	05097ASB4	DATE:	
JOB #:	05097	09-28-0	
SCALE:		SHEET:	C4
H: 1"=20'	V: n/a		



- NOTES:
1. INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
 2. SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL.
 3. SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.

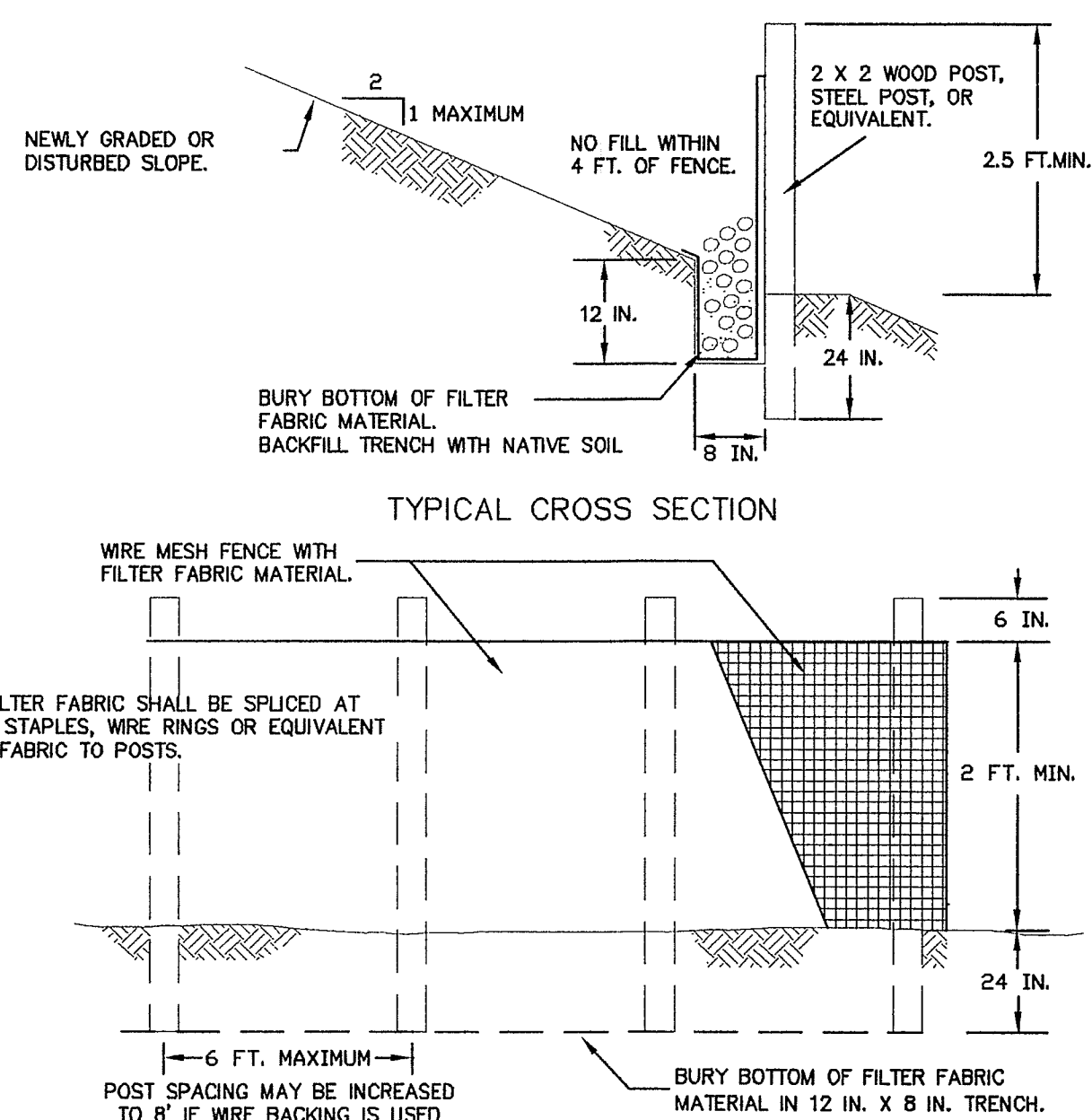
A CATCH BASIN INSERT
nts



B CONTROL MANHOLE - B-10.40
nts

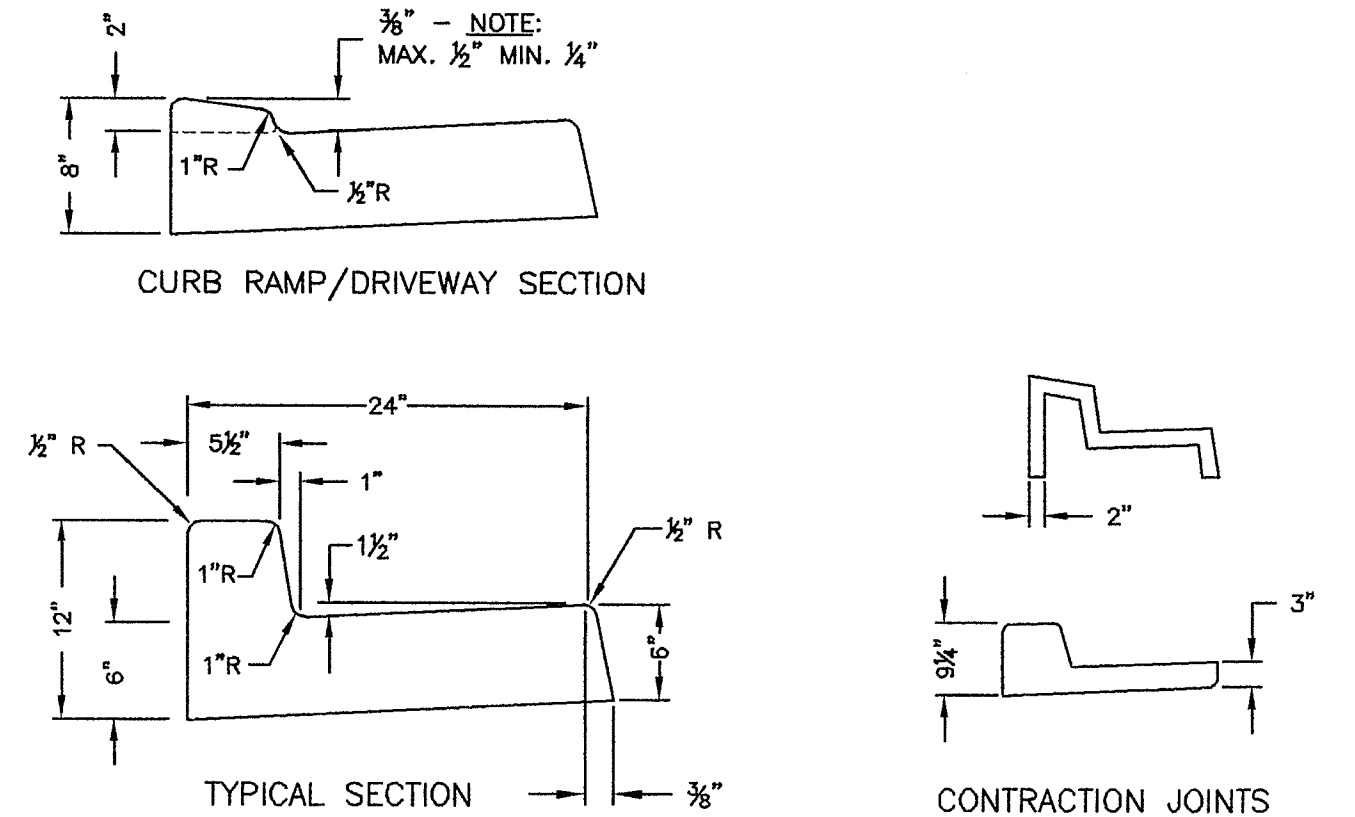
- NOTES
1. The pipe supports and the flow restrictor shall be constructed of the same material and be anchored at a maximum spacing of 36". Attach the pipe supports to the manhole with 5/8" stainless steel expansion bolts or embed the supports into the manhole wall 2".
 2. The vertical riser stem of the flow restrictor shall be the same diameter as the horizontal outlet pipe with a minimum diameter of 8".
 3. The flow restrictor shall be fabricated from one of the following materials:
0.060" Corrugated Aluminum Alloy Drain Pipe
0.064" Corrugated Galvanized Steel Drain Pipe with Treatment 1
0.064" Corrugated Aluminized Steel Drain Pipe
0.060" Aluminum alloy flat sheet, in accordance with ASTM B 209, 5052 H32 or EPS
High Density Polyethylene Storm Sewer Pipe
 4. The frame and ladder or steps are to be offset so that: the shear gate is visible from the top; the climb-down space is clear of the riser and gate; the frame is clear of the curb.
 5. The multi-orifice elbows may be located as shown, or all placed on one side of the riser to assure ladder clearance. The size of the elbows and their placement shall be specified in the Contract.
 6. Restrictor plate with orifice as specified in the Contract. The opening is to be cut round and smooth.
 7. The shear gate shall be made of aluminum alloy in accordance with ASTM B 26 and ASTM B 275, designation ZG32A; or cast iron in accordance with ASTM A 48, Class 30B.
The lift handle shall be made of a similar metal to the gate (to prevent galvanic corrosion), it may be of solid rod or hollow tubing, with adjustable hook as required.
A neoprene rubber gasket is required between the riser mounting flange and the gate flange.
Install the gate so that the level-line mark is level when the gate is closed.
The mating surfaces of the lid and the body shall be machined for proper fit.
All shear gate bolts shall be stainless steel.
 8. The shear gate maximum opening shall be controlled by limited hinge movement, a stop tab, or some other device.
 9. Alternative shear gate designs are acceptable if material specifications are met and flange bolt pattern matches.

ORIFICE SCHEDULE		
NO.	ELEV.	DIA. (IN.)
1	52.00	0.66
2	57.33	1.10
3	57.75	0.66



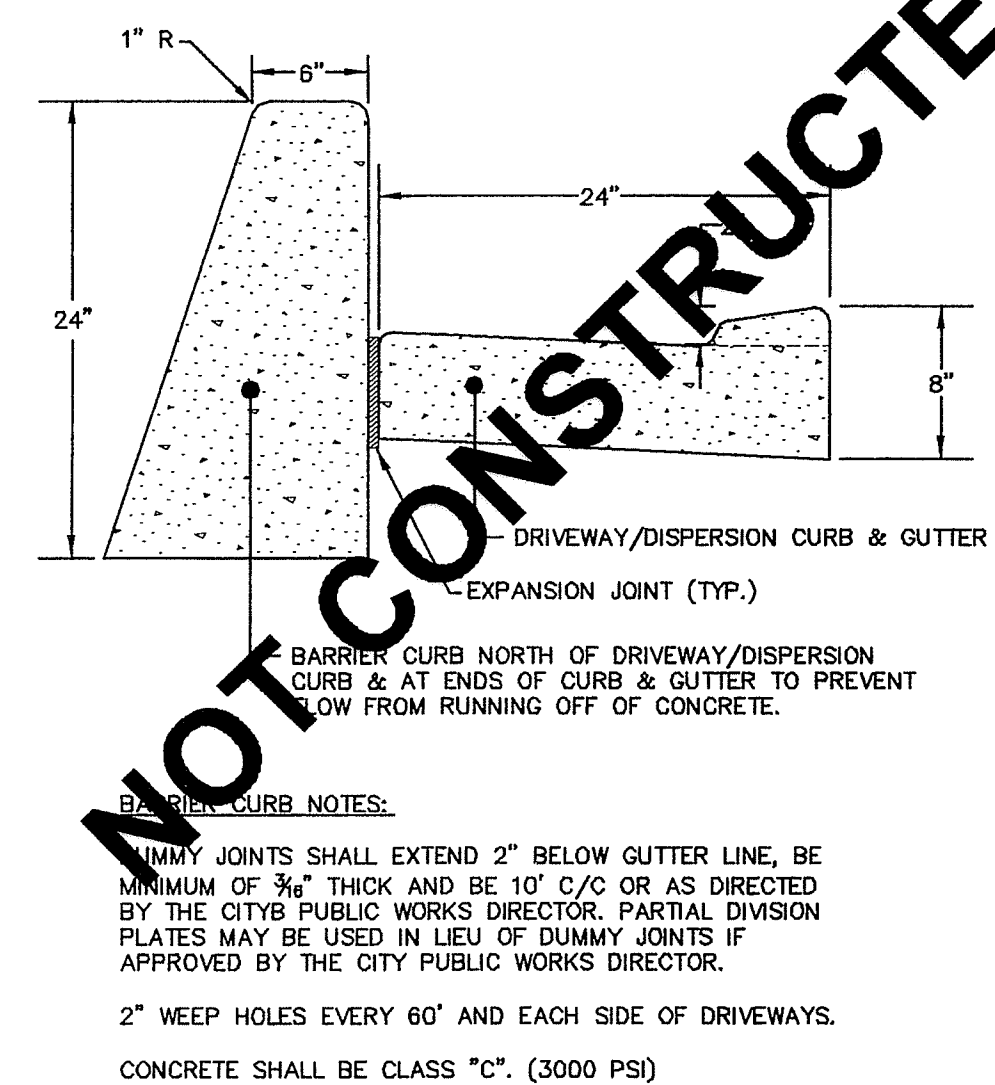
- NOTES:
1. FENCE SHALL NOT BE INSTALLED ON SLOPES STEEPER THAN 2 : 1.
 2. JOINTS IN FILTER FABRIC SHALL BE OVERLAPPED 5 INCHES AT POST.
 3. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO WIRE FENCE.
 4. REMOVE SEDIMENT WHEN IT REACHES 1/3 FENCE HEIGHT.

C SILTY FENCE
nts

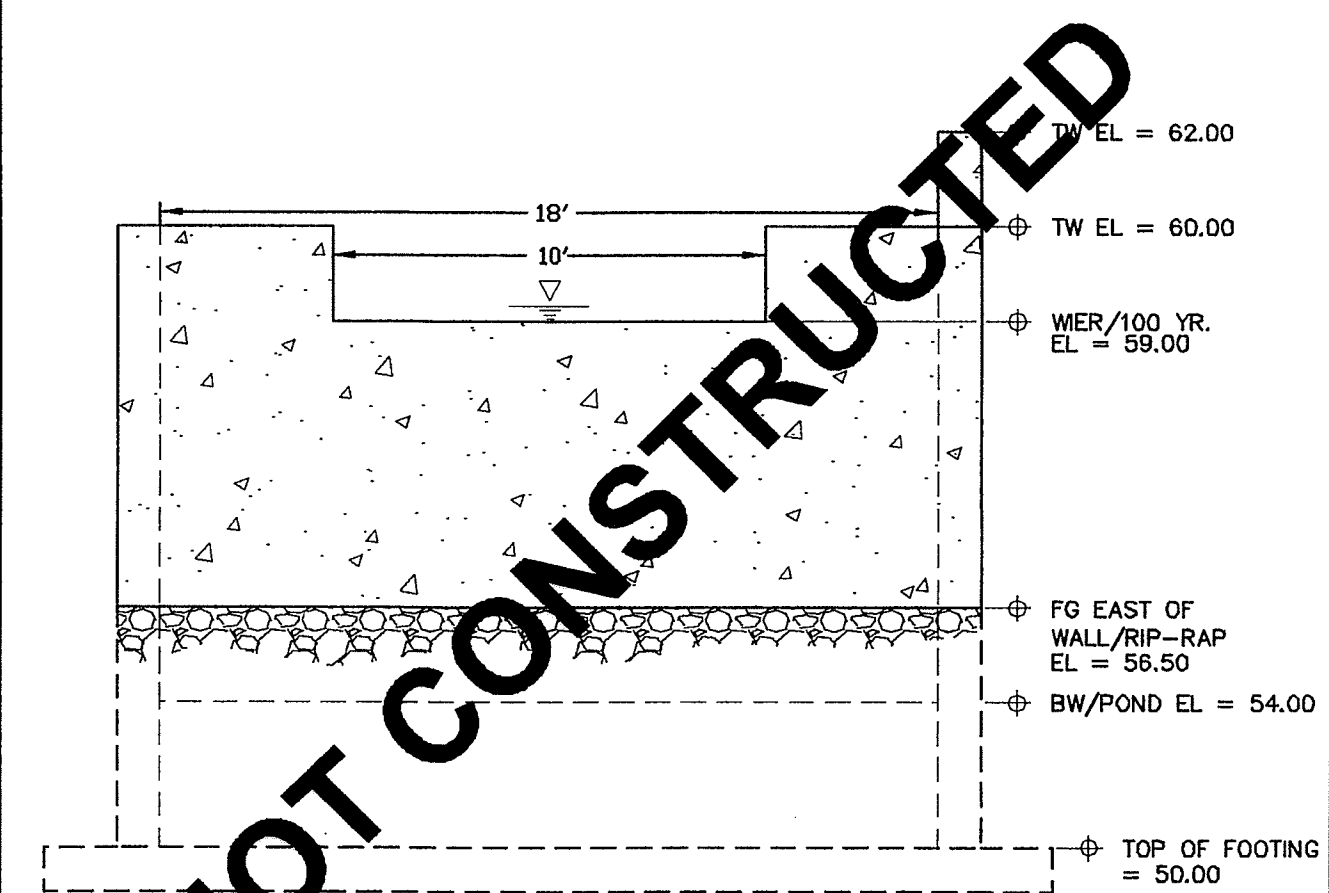


- GENERAL NOTES:
- CONTRACTION JOINTS OF ONE OF THE TYPES SHOWN ABOVE TO BE PLACED 10' C/C. JOINTS MUST COMPLETELY SEVER THE STRUCTURE TO THE POINTS SHOWN. JOINTS MAY BE MADE BY INSERTING MIN. 3/8" BITUMINOUS FILLER DUMMY JOINTS. JOINTS SHALL BE CLEANED AND EDGED.
- 2" WEEP HOLES TO BE PLACED ON EACH SIDE OF DRIVEWAY SECTION & A MAX. 60' 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, & COLD JOINTS OR A MAX. 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 A 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.

D CURB & GUTTER - C.O.F. R-9
nts



E RAIN GARDEN DISPERSION CURB & GUTTER
nts



F EMERGENCY OVERFLOW SPILLWAY
nts

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

No.	Date	REVISION
2	02-24-09	REVISED PER REVIEW COMMENTS
1	01-07-09	REVISED PER REVIEW COMMENTS

DESIGNED BY: TF	1408 North Garden Street Bellingham, WA 98225	T: 360.650.1408 F: 360.650.1401
DRAWN BY: JPS	FREELAND & ASSOCIATES	
CHECKED BY: TF		

CLIENT: MOUNTAIN VIEW RDM, LLC
910 HARRIS STREET, UNIT 502
BELLINGHAM, WA 98225

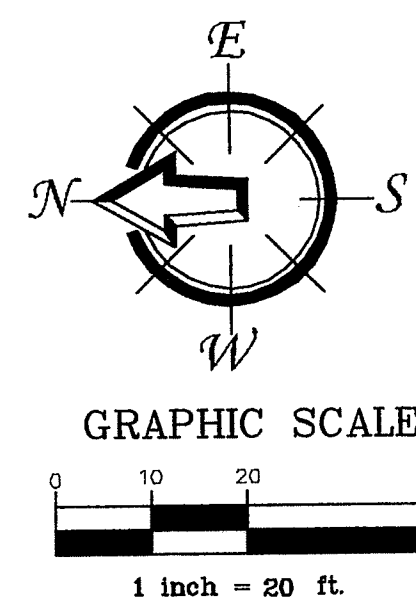
PROJECT LOCATION: NE 1/4, NW 1/4 SEC. 30; T. 39 N.; R. 2E; W.M.
2373 MOUNTAIN VIEW ROAD
FERDALE, WASHINGTON 98248

SHEET CONTENTS: STORMWATER & PAVEMENT DETAILS

DWG #:	05097ASB4	DATE:	09-28-09
JOB #:	05097	SHEET #:	C5
SCALE:	H: 1"=20'	V: n/a	

00399.005 9-3-10 #12

00349.006 9.3.10 KL



PARCEL NO. 390230170503

CROSSING INFORMATION (KING 1-4)
1. SS IE=62.00± OVER W IE=60.00±
2. SS IE=61.85± OVER W IE=60.35 MAX
*VERTICAL PIPE SEPARATION(S) MEASURED IN
FIELD 02-24-09 ARE APPROXIMATE

EXISTING WATER EASEMENT PER PHASE 1
IN FAVOR OF CITY OF FERDALE
INTERIOR OF LOTS 1 & 2 (TYP.)
BY THIS SHORT PLAT

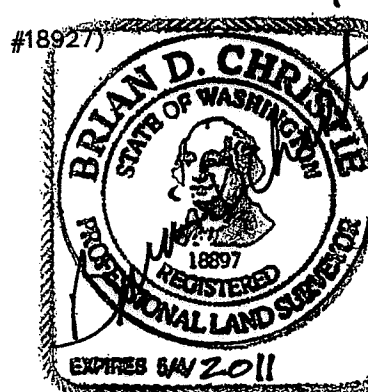
AF # 2100200498

PARCEL NO. 390230175445
(1) - POST INDICATOR VALVE

EXISTING 5 FOOT UTILITY EASEMENT
IN FAVOR OF CITY OF FERDALE
INTERIOR OF LOTS 1 & 2 (TYP.)
BY THIS SHORT PLAT

SURVEYOR'S CERTIFICATION:
"I CERTIFY THAT ON 9-10-2009 A FIELD AS-BUILT
SURVEY WAS PERFORMED AT BY ME OR
UNDER MY DIRECTION AND THAT DATA FROM THAT FIELD
SURVEY INCLUDING LOCATION SHOTS, INVERT
MEASUREMENTS AND FIELD NOTES WERE SUPPLIED TO
THE CIVIL ENGINEER OF RECORD FOR THEIR PREPARATION
OF THESE AS-BUILT PLANS.
SAID FIELD SURVEY WORK MEETS OR EXCEEDS THE
MINIMUM SURVEY STANDARDS AS PER WAC 332.130.090."
By Brian D. Churton Date: 8-4-2010

ENGINEER'S CERTIFICATION:
"I HEREBY CERTIFY THAT THE IMPROVEMENTS FOR
THE MOUNTAIN VIEW APARTMENTS HAVE BEEN
INSPECTED BY FREELAND & ASSOCIATES, INC. AND
TO THE BEST OF MY KNOWLEDGE, HAVE BEEN
CONSTRUCTED IN CONFORMANCE WITH THE CITY OF
FERDALE DEVELOPMENT STANDARDS, THE CITY OF
FERDALE MUNICIPAL CODE, SUBSEQUENT
STANDARDS ADOPTED BY REFERENCE THEREIN, AND
STANDARD ENGINEERING PRACTICE."
By _____ Date: _____



SHEET CONTENTS:

WATER & SANITARY SEWER PLAN

DWG #:

05097ASB4

JOB #:

05097

SCALE:

H: 1"=20' V: n/a

DATE:

09-28-09

SHEET:

C6

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1-800-424-5555

No.	Date	REVISION
2	04-07-09	REVISED FIREMAIN & WATERMAIN TO BUILDINGS
1	02-24-09	REVISED PER REVIEW COMMENTS

R.O.S. A.F. NO. 2000202766

PARCEL NO. 390230121491

DESIGNED BY:

TF

DRAWN BY:

AMN

CHECKED BY:

TF



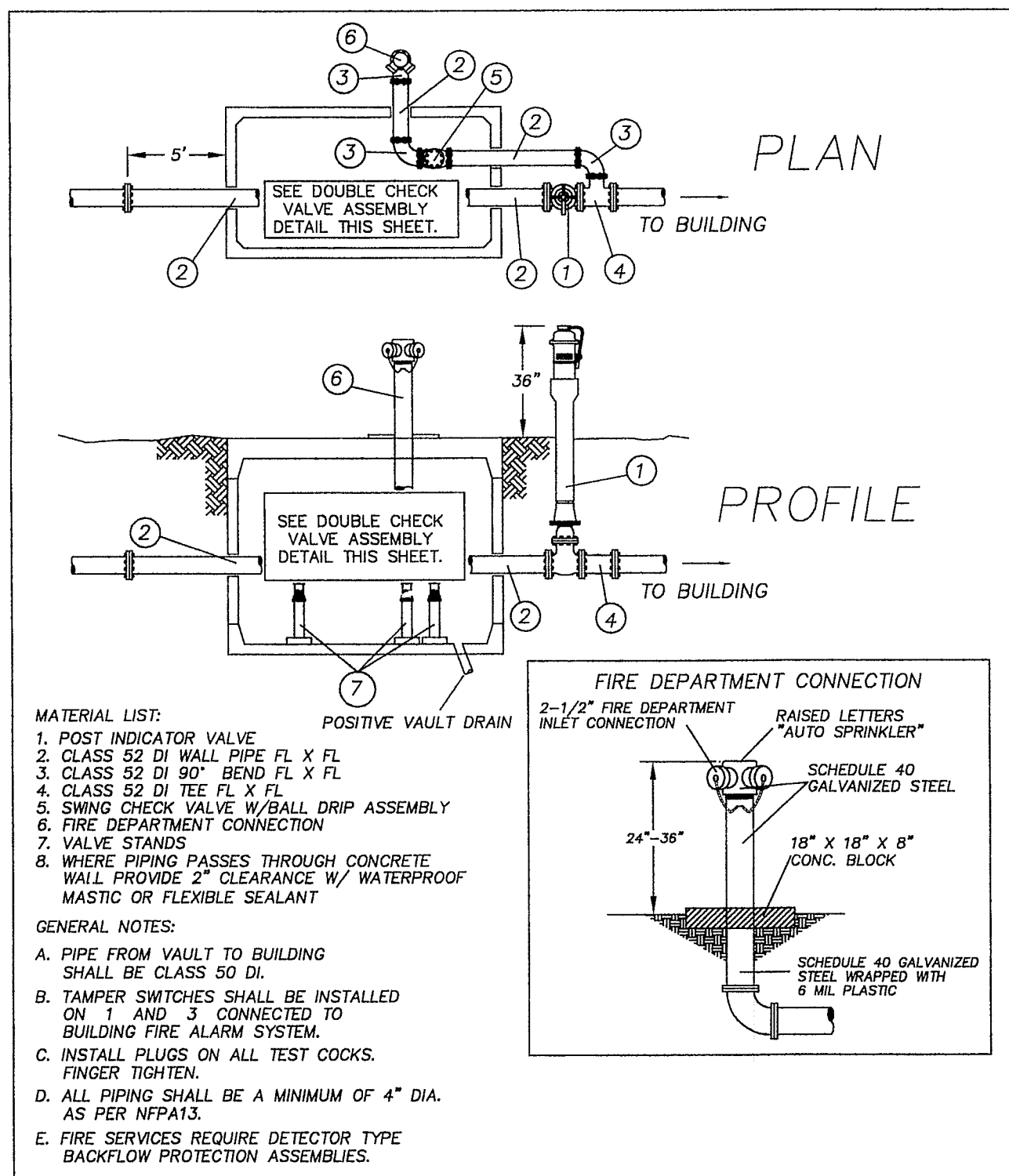
1408 North Garden Street
Bellingham, WA 98225

**FREELAND
& ASSOCIATES**

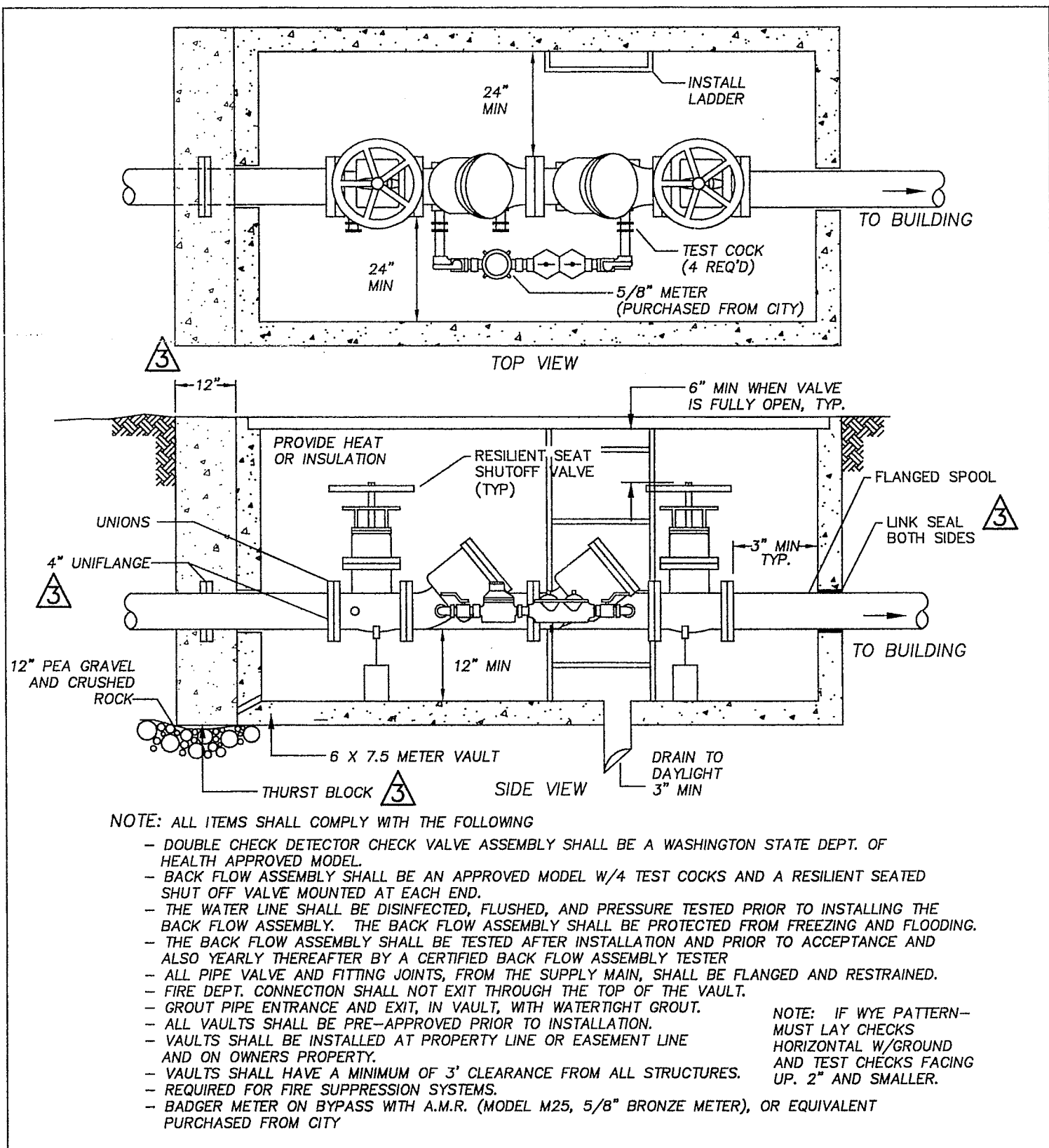
CLIENT:

MOUNTAIN VIEW RDM, LLC
910 HARRIS STREET, UNIT 502
BELLINGHAM, WA 98225

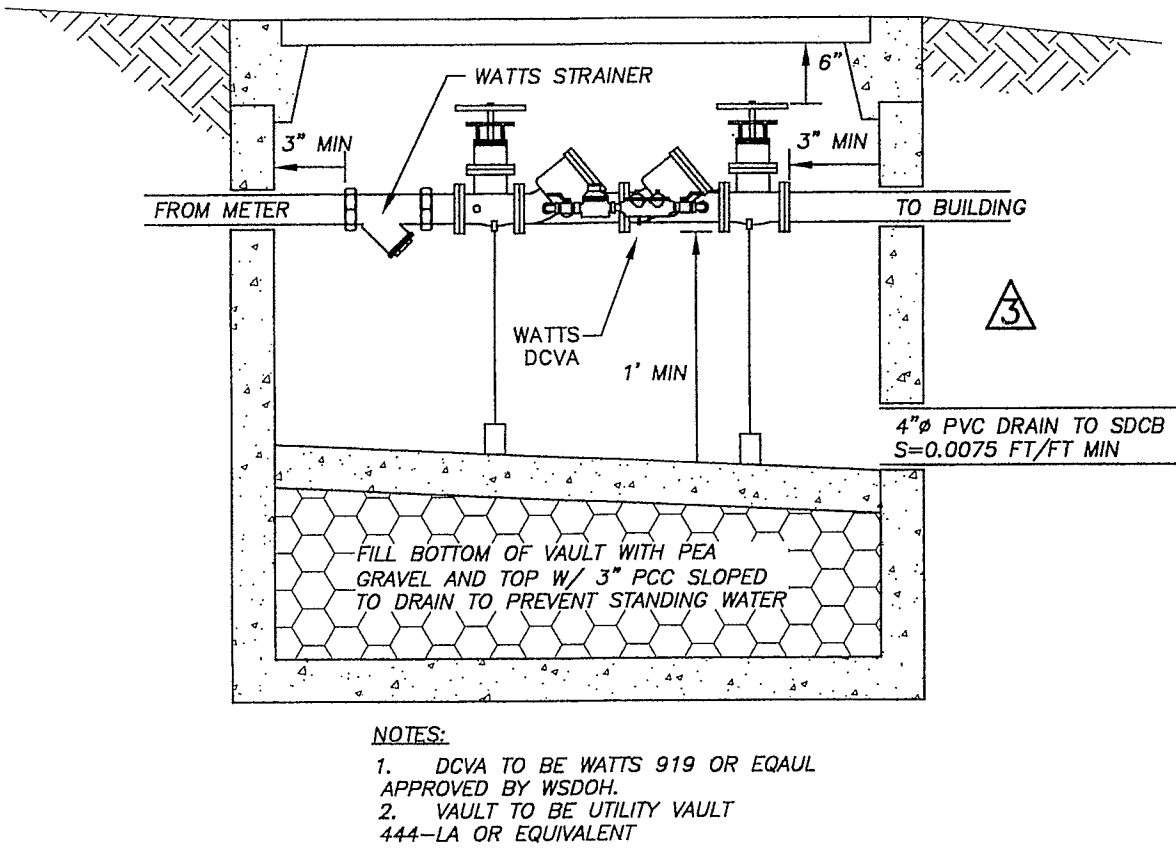
PROJECT LOCATION: NE 1/4, NW 1/4 SEC. 30; T. 39 N.; R. 2E; W.M.
2373 MOUNTAIN VIEW ROAD
FERDALE, WASHINGTON 98248



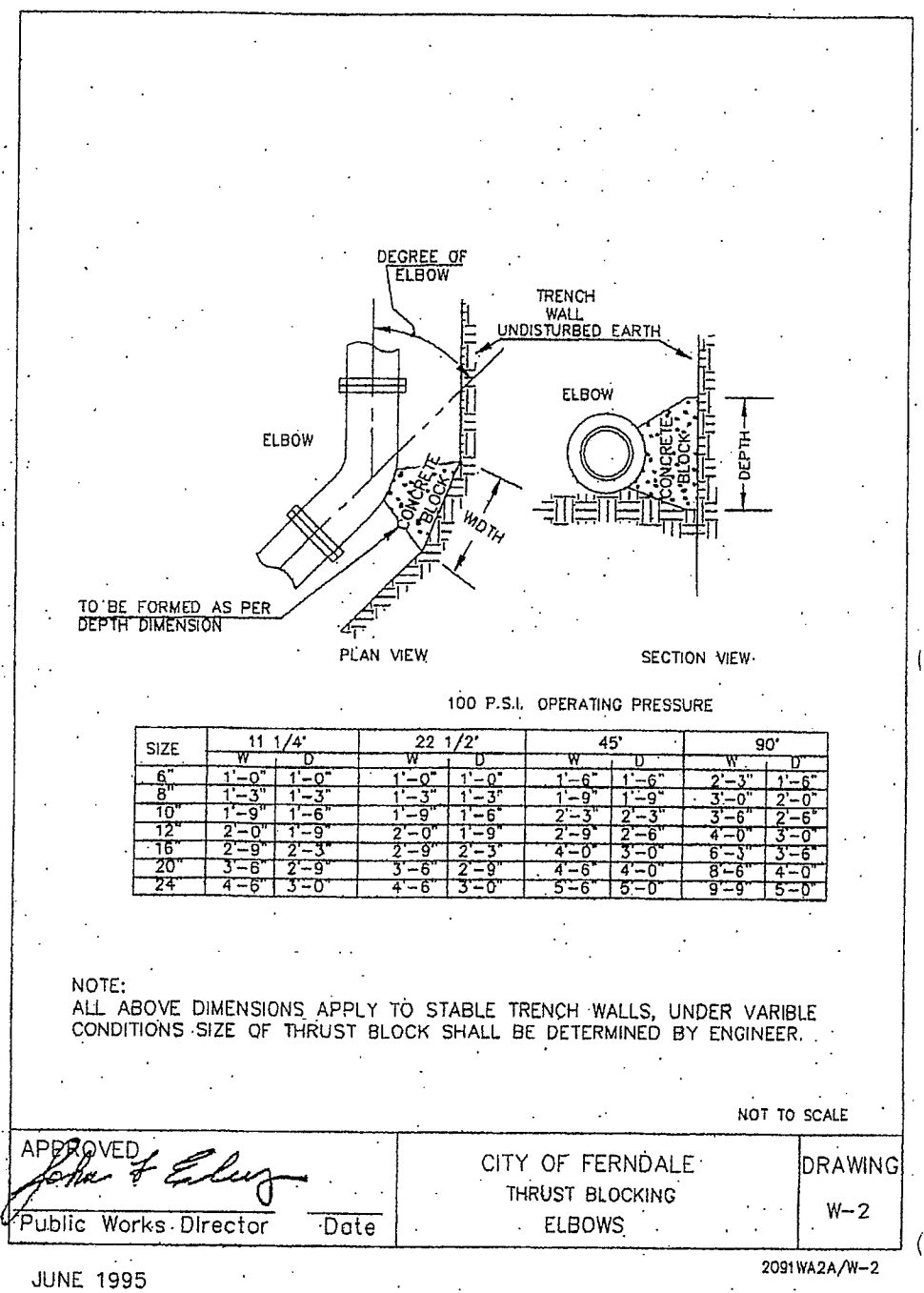
A DOUBLE CHECK VALVE ASSEMBLY WITH FDC
nts



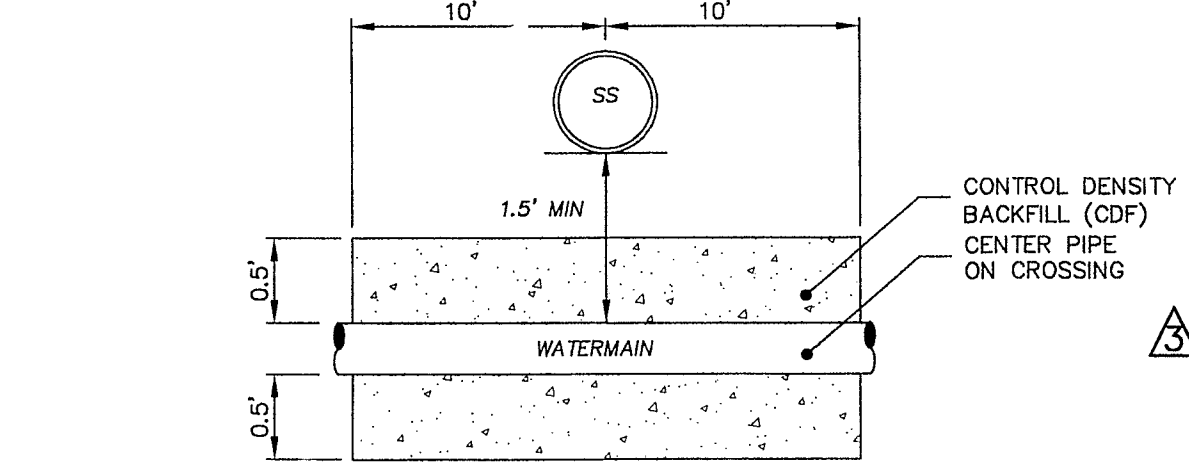
B DOUBLE CHECK DETECTOR CHECK VALVE ASSEMBLY
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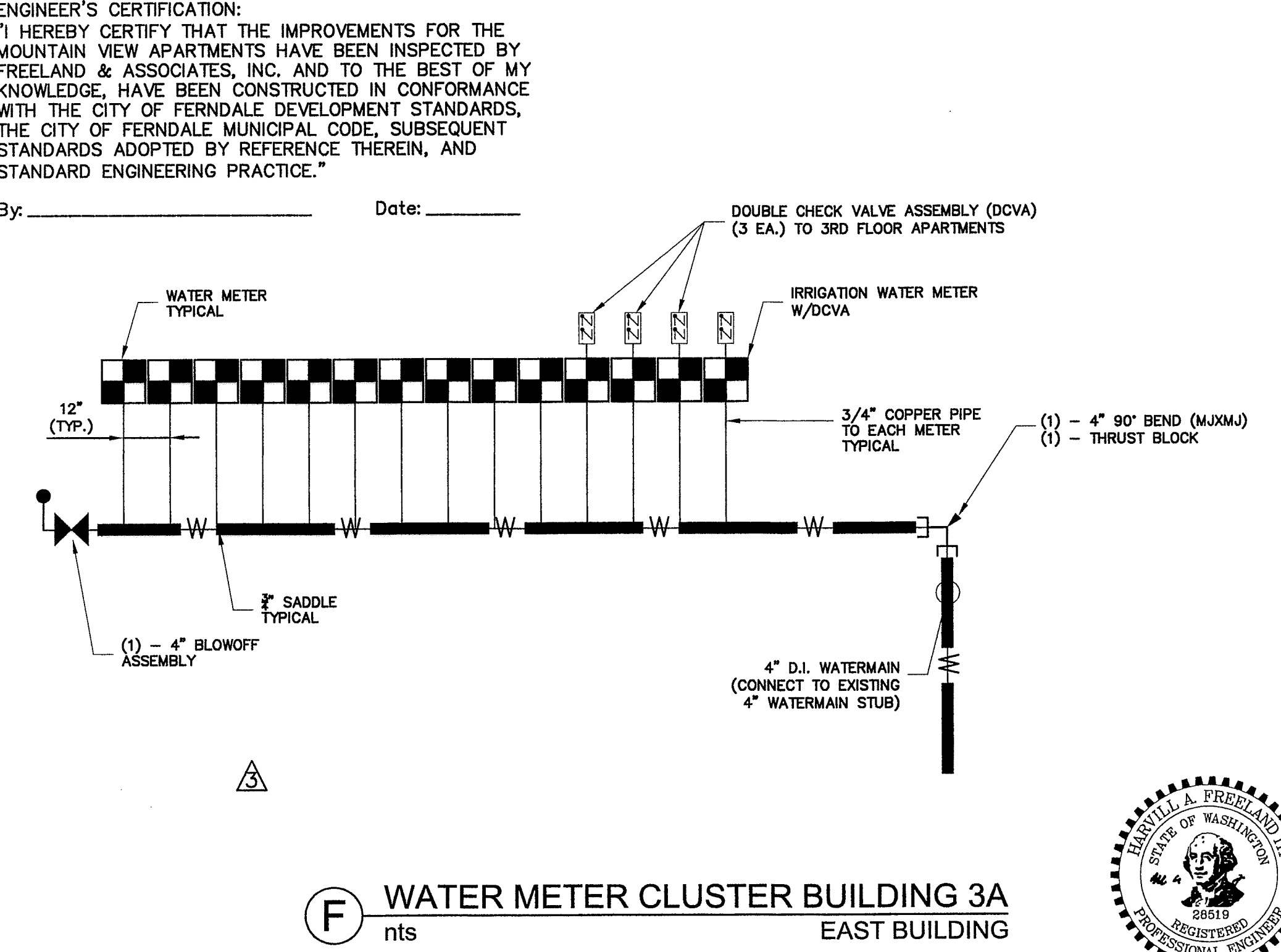
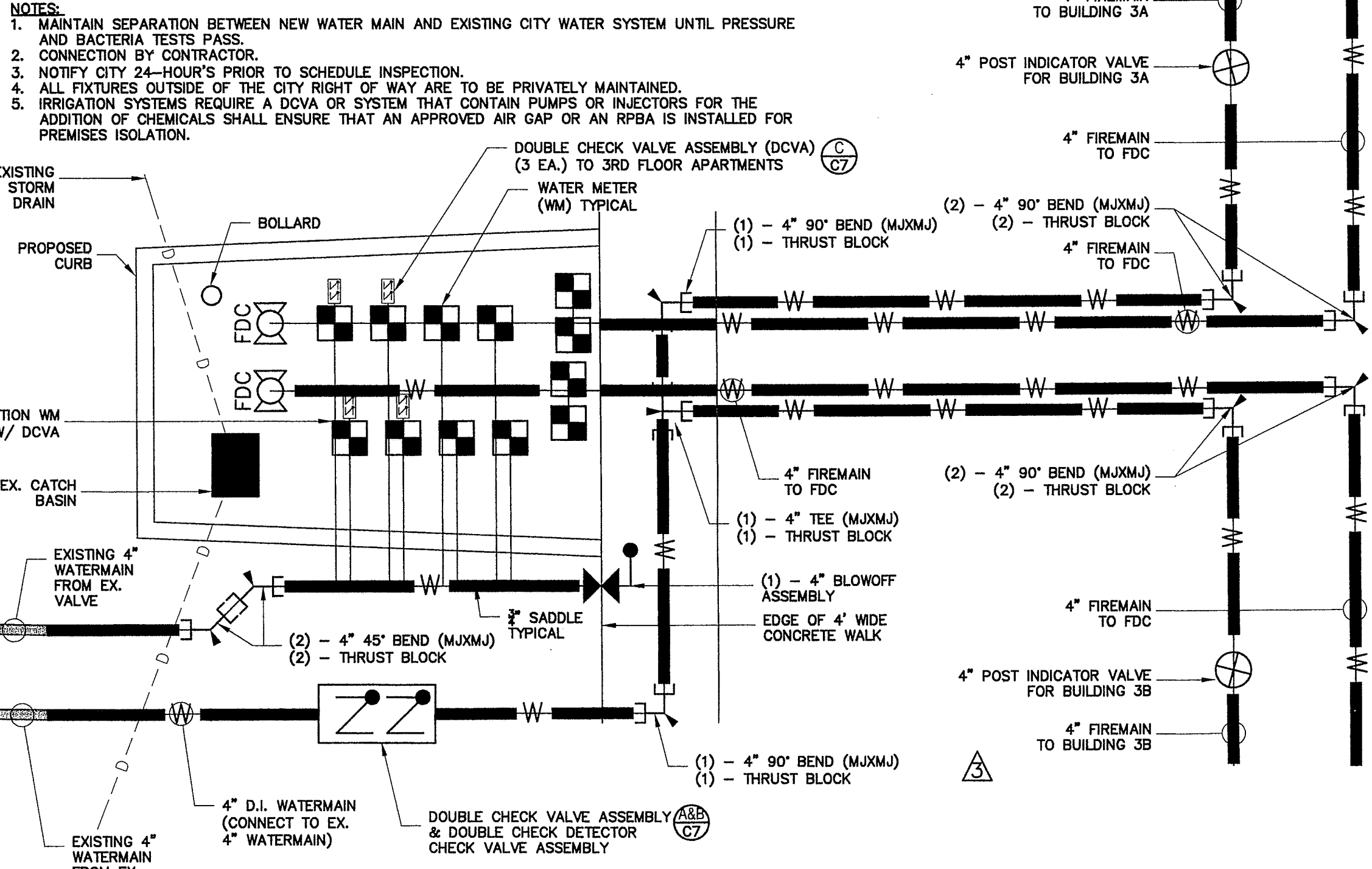
C DOUBLE CHECK VALVE BACKFLOW ASSEMBLY
nts



D THRUST BLOCKING ELBOWS - C.O.F. W-2
nts



E FIREMAIN & WATERMAIN LAYOUT PLAN
nts



F WATER METER CLUSTER BUILDING 3A
nts



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1-800-424-5555

No.	Date	REVISION
3	04-07-09	REVISED WATER SERVICE DETAILS
2	02-24-09	REVISED PER REVIEW COMMENTS
1	12-19-08	REVISED PER REVIEW COMMENTS

DESIGNED BY: TF
DRAWN BY: JPS
CHECKED BY: TF
FREELAND & ASSOCIATES
1408 North Garden Street
Bellingham, WA 98225
T: 360.650.1408
F: 360.650.1401

CLIENT: MOUNTAIN VIEW RDM, LLC
910 HARRIS STREET, UNIT 502
BELLINGHAM, WA 98225
PROJECT LOCATION: NE 1/4, NW 1/4 SEC. 30; T. 39 N.; R. 2E; W.M.
2373 MOUNTAIN VIEW ROAD
FERNDAL, WASHINGTON 98248

SHEET CONTENTS: WATER & SANITARY SEWER
DETAILS

DWG #:	05097ASB4	DATE:	09-28-09
JOB #:	05097	SHEET:	C7
SCALE:	H: 1"=20'	V: n/a	

00399.007 9.3.10 K2