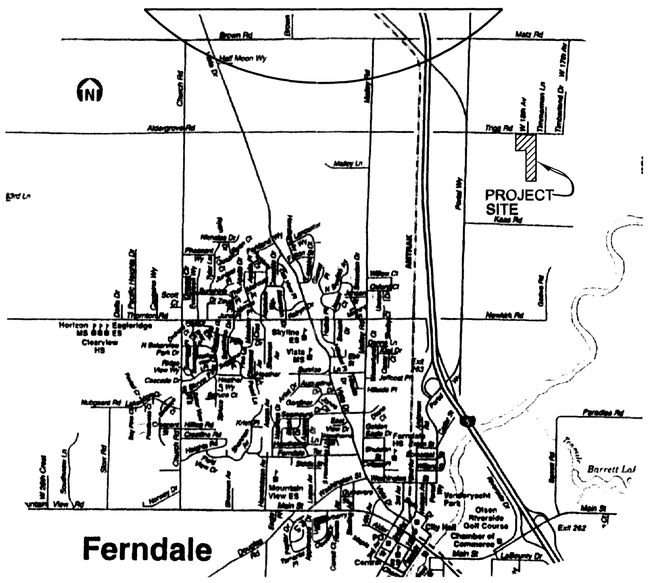
PORTAL MANOR – P.U.D.

SUBDIVISION IMPROVEMENTS

SECTION 17, TOWNSHIP 39 NORTH, RANGE 2 EAST, WM
CITY OF FERNDALE, WHATCOM COUNTY, WASHINGTON

DEVELOPER: WHATCOM SELF HELP HOMES

SHEET INDEX:



VICINITY MAP

NTS

LEGEND

- PROPERTY CORNER
- BRASS DISK MONUMENT
- SANITARY SEWER MANHOLE
- STORM SEWER CATCH BASIN
- STORM SEWER JUNCTION BOX
- TREE
- STREET LIGHT
- FIRE HYDRANT
- THRUST BLOCK
- WATER METER
- NEW PROPERTY LINE
- PROPOSED FUTURE PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY CENTERLINE
- STORM SEWER LINE
- SANITARY SEWER LINE
- WATER LINE

GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT WSDOT/APWA STANDARD SPECIFICATIONS, CITY OF FERNDALE DEVELOPMENT STANDARDS, AND SHALL BE SUBJECT TO APPROVAL BY CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.

2. DEVELOPER/CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF FERNDALE DIVISION OF ENGINEERS A MINIMUM OF 3 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION. WORK IN THE RIGHT-OF-WAY.

3. A REVOCABLE ENCROACHMENT PERMIT SHALL BE OBTAINED PRIOR TO COMMENCING

4. CONTRACTOR SHALL CONTACT UTILITY LOCATION SERVICE 48 HOURS PRIOR TO STARTING CONSTRUCTION AT 1-800-424-5555.

5. OWNER MUST PROVIDE THE FOLLOWING TESTS:
   A. CURB/GUTTER, SIDEWALK, ROADWAY BASE COMPACTION - MINIMUM 1 TEST EVERY 3 STATIONS, MINIMUM 2 TESTS PER CATEGORY, OR AT THE DIRECTION OF CITY INSPECTOR.
   B. CONCRETE CYLINDER COMPRESSION - 1 CYLINDER EVERY THIRD LOAD, MINIMUM 2 SAMPLES.

   C. A.C. PAVING DENSITY.

6. ALL WORK MUST BE INSPECTED BY A REPRESENTATIVE OF THE CITY OF FERNDALE, CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE FOR CITY INSPECTION AS FOLLOWS:
   A. PLACEMENT OF TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.
   B. PLACEMENT OF WATER LINE AND BACKFILLING OF WATER LINE WITHIN ROAD RIGHT-OF-WAY.
   C. PLACEMENT AND BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHT-OF-WAY.
   D. ROADWAY GRADING AT:
      1. COMPLETION OF SUBGRADE.
      2. COMPLETION OF BALLAST.
      3. COMPLETION OF CRUSHED SURFACING.
   E. POURING OF CURB/GUTTER AND SIDEWALK.
   F. ASPHALT PAVING IN PROGRESS.
   G. OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
   H. END OF MAINTENANCE PERIOD.

7. ALL TESTING REQUIRED FOR THE IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE OWNER AND SHALL BE IN CONFORMANCE WITH CITY OF FERNDALE DEVELOPMENT STANDARDS.

8. STORM PIPE SHALL BE OF AN APPROVED MATERIAL AND OF THE SIZE NOTED ON THE PLANS.

9. CONTRACTOR SHALL RIP RAP ALL CULVERT INLETS AND OUTLETS.

10. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.

11. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND FERTILIZED FOR EROSION CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR SLOPE EROSION UNTIL VEGETATION IS FIRMLY ESTABLISHED.

12. CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM CITY OF FERNDALE DIVISION OF ENGINEERS OF ANY PROPOSED CHANGES IN PLAN PRIOR TO CONSTRUCTION OF THAT CHANGE. CONTRACTOR SHALL KEEP RECORD OF DEVIATIONS AND FORWARD TO THE ENGINEER AND CITY OF FERNDALE DIVISION OF ENGINEERS.

13. TRAFFIC CONTROL TO BE MAINTAINED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 1-07.23.

14. DEVELOPER/CONTRACTOR SHALL POST A MAINTENANCE SECURITY AS REQUIRED BY THE CITY OF FERNDALE ENGINEER.

15. ENGINEER WILL PROVIDE CERTIFIED AS-BUILT MYLARS TO CITY OF FERNDALE DIVISION OF ENGINEERS UPON PROVISIONAL ACCEPTANCE OF NEW ROAD IMPROVEMENTS SECTION 403(A)4COFS.

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

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR - A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON + ASSOCIATES 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.

P.E, PLS
RONALD T. JEPSON

APPROVED
BY Robert Carter
CITY OF FERNDALE
March, 06

AS BUILT

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	NA
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	08-22-2005

REVISION

RONALD T. JEPSON
STATE OF WASHINGTON
9361
REGISTERED
PROFESSIONAL ENGINEER
1/25/2006

TITLE SHEET

CLIENT:
WHATCOM SELF HELP HOMES

00130

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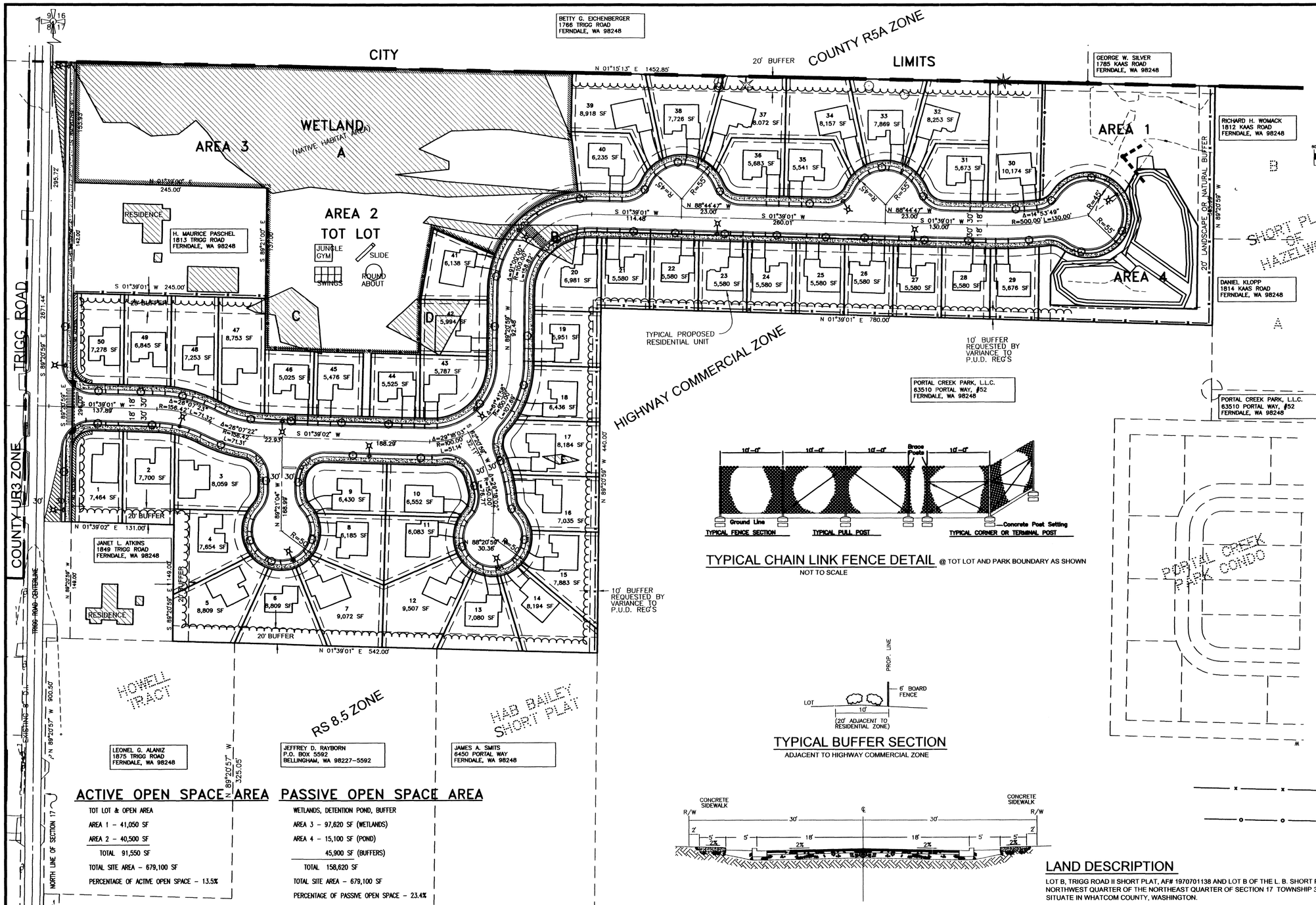

TYPICAL CHAIN LINK FENCE DETAIL @ TOT LOT AND PARK BOUNDARY AS SHOWN

NOT TO SCALE

TYPICAL BUFFER SECTION

ADJACENT TO HIGHWAY COMMERCIAL ZONE

TYPICAL STREET SECTION

NOT TO SCALE

ACTIVE OPEN SPACE AREA

TOT LOT & OPEN AREA

AREA 1 - 41,050 SF

AREA 2 - 40,500 SF

TOTAL 91,550 SF

TOTAL SITE AREA - 679,100 SF

PERCENTAGE OF ACTIVE OPEN SPACE - 13.5%

PASSIVE OPEN SPACE AREA

WETLANDS, DETENTION POND, BUFFER

AREA 3 - 97,620 SF (WETLANDS)

AREA 4 - 15,100 SF (POND)

45,900 SF (BUFFERS)

TOTAL 158,620 SF

TOTAL SITE AREA - 679,100 SF

PERCENTAGE OF PASSIVE OPEN SPACE - 23.4%

NOTES:

AN EASEMENT IS RESERVED FOR AND GRANTED TO THE CITY OF FERNDALE, PUGET SOUND ENERGY, GENERAL TELEPHONE CO. OF THE NORTHWEST, CASCADE NATURAL GAS CORP., U.S. POSTAL SERVICE, AT&T BROADBAND AND THEIR PERSPECTIVE SUCCESSORS AND ASSIGNS UNDER AND UPON THE FRONT 10 FEET OF EACH LOT AND TRACT ABUTTING THE STREETS IN WHICH TO INSTALL, LAY, CONSTRUCT, RENEW, OPERATE, MAINTAIN AND REMOVE UNDERGROUND CONDUITS, STORM, AND UTILITIES SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC, TELEPHONE, WATER, GAS, CABLE TELEVISION AND POSTAL SERVICES, TOGETHER WITH THE RIGHT TO ACCESS AT ALL TIMES FOR THE PURPOSE STATED.

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

PRELIMINARY PLAT DATA

OWNERS/DEVELOPERS:	WHATCOM SELF HELP HOMES
ADDRESS:	5373 GUIDE MERIDIAN #E105 BELLINGHAM, WASHINGTON 98226 (360) 398-0223
CONSULTANT:	RONALD T. JEPSON & ASSOCIATES 222 GRAND AVE. SUITE C BELLINGHAM, WASHINGTON 98225 (360) 733-5760
NUMBER OF LOTS:	50
MINIMUM LOT SIZE:	5,000 SQUARE FEET
MAXIMUM LOT SIZE:	10,174 SQUARE FEET
AVERAGE LOT SIZE:	7,350 SQUARE FEET
TOTAL AREA:	15.59 ACRES (679,100 SQUARE FEET)
OPEN SPACE ALLOCATION INCLUDING DETENTION PONDS AND WETLANDS:	197,092 SQUARE FEET(4.53 ACRES) 30%
WETLAND AREA EFFECTED BY PROPOSED LOTS:	6,197 SQUARE FEET
DENSITY:	3.2 UNITS PER ACRE
AREA ZONING:	RS 8.5
VERTICAL DATUM:	CITY OF FERNDALE SANITARY SEWER DATUM(PORTAL WAY SEWER)

NOTE: ALL STREETS DEDICATED TO THE PUBLIC

TYPICAL SETBACKS

FRONT YARD - 20'

BACK YARD - 10' PLUS P.U.D. BUFFER

SIDE YARD - 5 FEET

WETLAND AREA TABLE

A	70,000 S.F.
B	4,236 S.F.
C	4,057 S.F.
D	4,219 S.F.
E	303 S.F.

TOTAL 82,815 S.F.

DELINEATED WETLAND

WETLANDS TO BE UTILIZED IN THIS PLAN

FENCE NOTE:

6' BOARD FENCE ALSO TO BE INSTALLED ALONG SOUTH BOUNDARY SOUTH OF POND, ON NORTH SIDE OF TOT LOT AND ON EAST LINE OF LOTS 47-50.

4' CHAINLINK SECURITY FENCE, PER DETAIL, TO BE INSTALLED AROUND TOT LOT AND WATER QUALITY DETENTION FACILITY.

LAND DESCRIPTION

LOT B, TRIGG ROAD II SHORT PLAT, AF# 1970701138 AND LOT B OF THE L. B. SHORT PLAT, AF# 1970603345 ALL IN THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17 TOWNSHIP 39 NORTH, RANGE 2 EAST OF W.M., SITUATE IN WHATCOM COUNTY, WASHINGTON.

APPROVED
MAY 0 9 2006
BY
CITY OF FERNDALE

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

RONALD T. JEPSON PE 6/10/05

AS BUILT

RONALD T. JEPSON
STATE OF WASHINGTON
9361
REGISTERED PROFESSIONAL LAND SURVEYOR
1/25/2006
6/10/05

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	1"=60'-0"
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

PORTAL MANOR
A RESIDENTIAL P.U.D.
SITE PLAN

CLIENT:
WHATCOM SELF HELP HOMES

00130

P1

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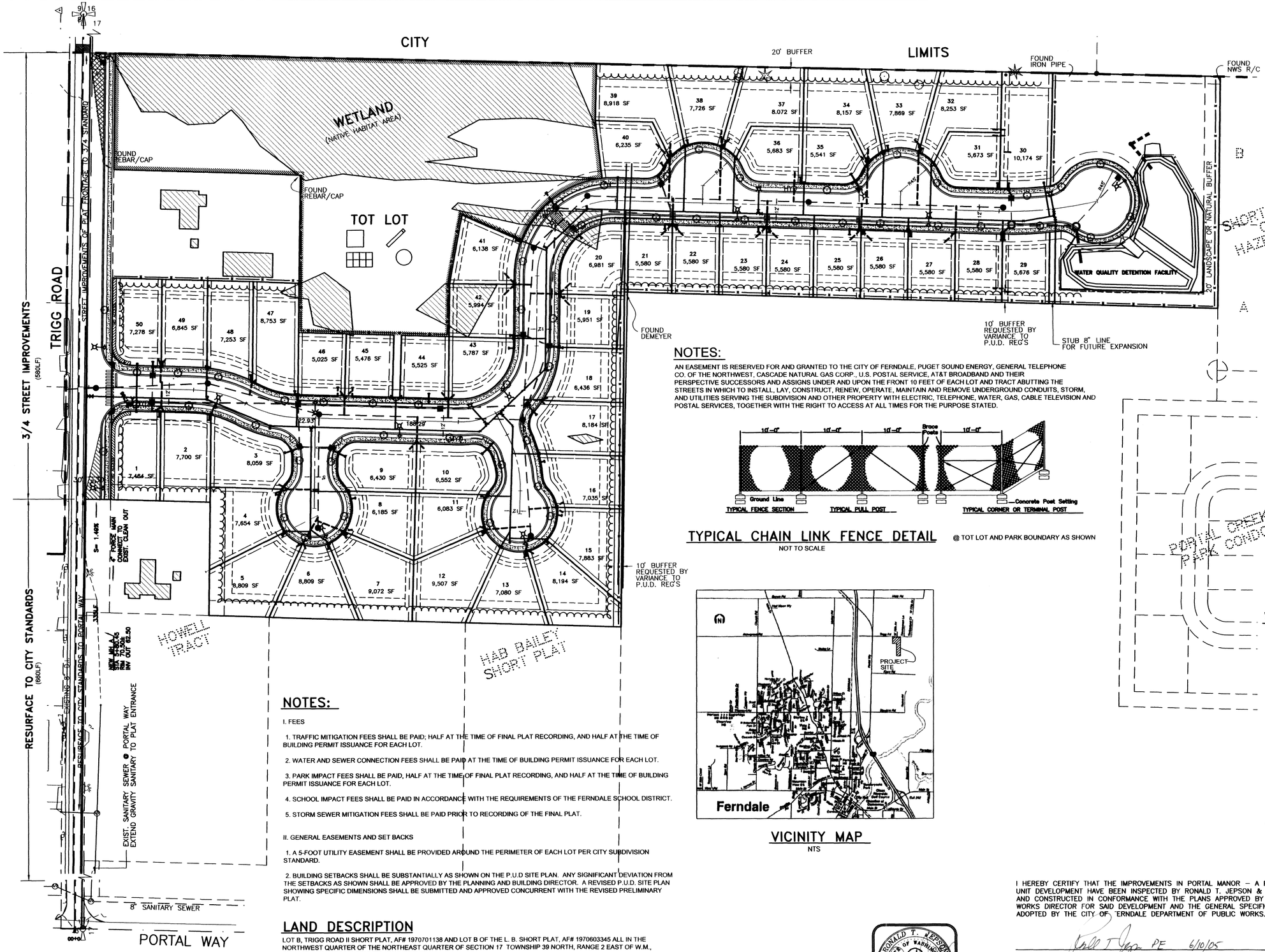

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TYPICAL CHAIN LINK FENCE DETAIL

NOT TO SCALE

@ TOT LOT AND PARK BOUNDARY AS SHOWN

VICINITY MAP

NTS

NOTES:

I. FEES

1. TRAFFIC MITIGATION FEES SHALL BE PAID; HALF AT THE TIME OF FINAL PLAT RECORDING, AND HALF AT THE TIME OF BUILDING PERMIT ISSUANCE FOR EACH LOT.

2. WATER AND SEWER CONNECTION FEES SHALL BE PAID AT THE TIME OF BUILDING PERMIT ISSUANCE FOR EACH LOT.

3. PARK IMPACT FEES SHALL BE PAID, HALF AT THE TIME OF FINAL PLAT RECORDING, AND HALF AT THE TIME OF BUILDING PERMIT ISSUANCE FOR EACH LOT.

4. SCHOOL IMPACT FEES SHALL BE PAID IN ACCORDANCE WITH THE REQUIREMENTS OF THE FERNDALE SCHOOL DISTRICT.

5. STORM SEWER MITIGATION FEES SHALL BE PAID PRIOR TO RECORDING OF THE FINAL PLAT.

II. GENERAL EASEMENTS AND SET BACKS

1. A 5-FOOT UTILITY EASEMENT SHALL BE PROVIDED AROUND THE PERIMETER OF EACH LOT PER CITY SUBDIVISION STANDARD.

2. BUILDING SETBACKS SHALL BE SUBSTANTIALLY AS SHOWN ON THE P.U.D SITE PLAN. ANY SIGNIFICANT DEVIATION FROM THE SETBACKS AS SHOWN SHALL BE APPROVED BY THE PLANNING AND BUILDING DIRECTOR. A REVISED P.U.D. SITE PLAN SHOWING SPECIFIC DIMENSIONS SHALL BE SUBMITTED AND APPROVED CONCURRENT WITH THE REVISED PRELIMINARY PLAT.

LAND DESCRIPTION

LOT B, TRIGG ROAD II SHORT PLAT, AF# 1970701138 AND LOT B OF THE L. B. SHORT PLAT, AF# 1970603345 ALL IN THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 17 TOWNSHIP 39 NORTH, RANGE 2 EAST OF W.M., SITUATE IN WHATCOM COUNTY, WASHINGTON.

PRELIMINARY PLAT DATA

OWNERS/DEVELOPERS:	WHATCOM SELF HELP HOMES
ADDRESS:	5373 GUIDE MERIDIAN #E105 BELLINGHAM, WASHINGTON 98226 (360) 398-0223
CONSULTANT:	RONALD T. JEPSON & ASSOCIATES 222 GRAND AVE., SUITE 'C' BELLINGHAM, WASHINGTON 98225 (360) 733-5760
NUMBER OF LOTS:	50
MINIMUM LOT SIZE:	5,000 SQUARE FEET
MAXIMUM LOT SIZE:	10,174 SQUARE FEET
AVERAGE LOT SIZE:	7,350 SQUARE FEET
DENSITY:	3.2 UNITS PER ACRE
TOTAL AREA:	15.59 ACRES (679,100 SQUARE FEET)
OPEN SPACE ALLOCATION INCLUDING DETENTION PONDS WETLANDS & BUFFERS	158,620 SQUARE FEET(3.64 ACRES) 23.4%
WETLAND AREA EFFECTED BY PROPOSED LOTS:	6,197 SQUARE FEET
AREA TO BE DEDICATED TO COMMON USE:	
WATER QUALITY & DETENTION AREA:	15,100 SQUARE FEET
ACTIVE OPEN SPACE	
TOT LOT:	40,500 SQUARE FEET
SOUTH PARK	41,050 SQUARE FEET
TOTAL	91,150 SQUARE FEET (13.5%)
AREA ZONING:	RS 8.5
AVERAGE HOUSE SIZE:	1525 SQUARE FEET
ROAD RIGHT-OF-WAY AREA:	128,172 SQUARE FEET
NGVD DATUM	SEE CONTOURS

WETLAND AREA TABLE

A	70,000 S.F.
B	4,236 S.F.
C	4,057 S.F.
D	4,219 S.F.
E	303 S.F.
TOTAL	82,815 S.F.

DELINEATED WETLAND

WETLANDS TO BE UTILIZED IN THIS PLAN

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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Ronald T. Jepson PE 6/10/05

RONALD T. JEPSON

APPROVED
MAY 12 2006
BY Robert Carle
CITY OF FERNDALE

AS BUILT

00130

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	1"=60'-0"
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON
STATE OF WASHINGTON
9361
REGISTERED
PROFESSIONAL LAND SURVEYOR
1/25/2006
6/10/05

PORTAL MANOR
PRELIMINARY PLAT

CLIENT:
WHATCOM SELF HELP HOMES

P2

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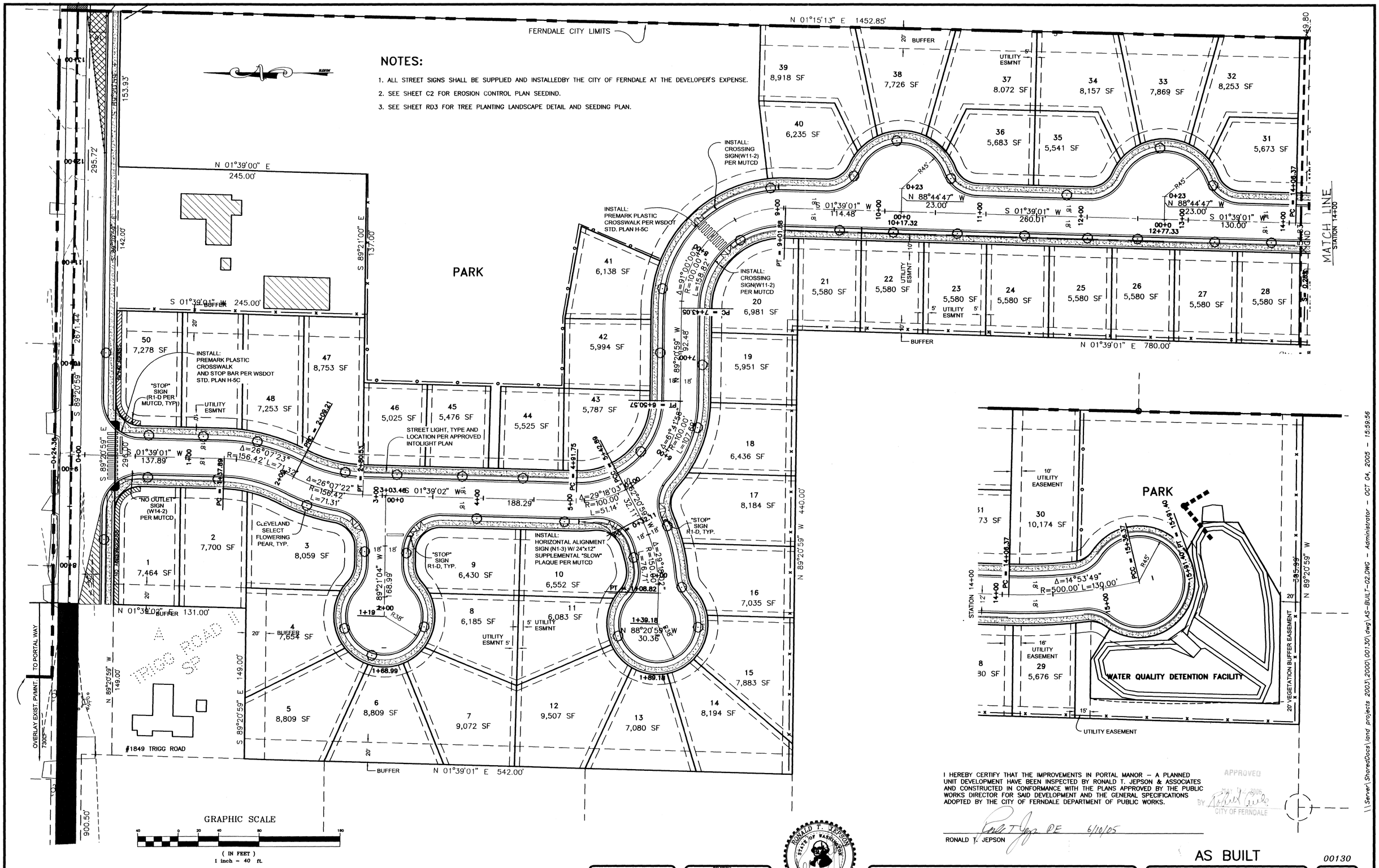
NOTES:

1. ALL STREET SIGNS SHALL BE SUPPLIED AND INSTALLEDBY THE CITY OF FERNDALE AT THE DEVELOPER'S EXPENSE.
2. SEE SHEET C2 FOR EROSION CONTROL PLAN SEEDIND.
3. SEE SHEET RD3 FOR TREE PLANTING LANDSCAPE DETAIL AND SEEDING PLAN.



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RONALD T. JEPSON, PE 6/10/05

APPROVED MAY 17 2006 BY CITY OF FERNDALE

AS BUILT

00130

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	1"=40'-0"
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON STATE OF WASHINGTON 9361 REGISTERED PROFESSIONAL ENGINEER 6/10/05 EXP. 1/25/2006

PORTAL MANOR
ROAD STATIONING & TRAFFIC CONTROL

CLIENT: WHATCOM SELF HELP HOMES

P3

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NOTES:

1. ALL STREET SIGNS SHALL BE SUPPLIED AND INSTALLEDBY THE CITY OF FERNDALE AT THE DEVELOPER'S EXPENSE.
2. SEE SHEET C2 FOR EROSION CONTROL PLAN SEEDIND.
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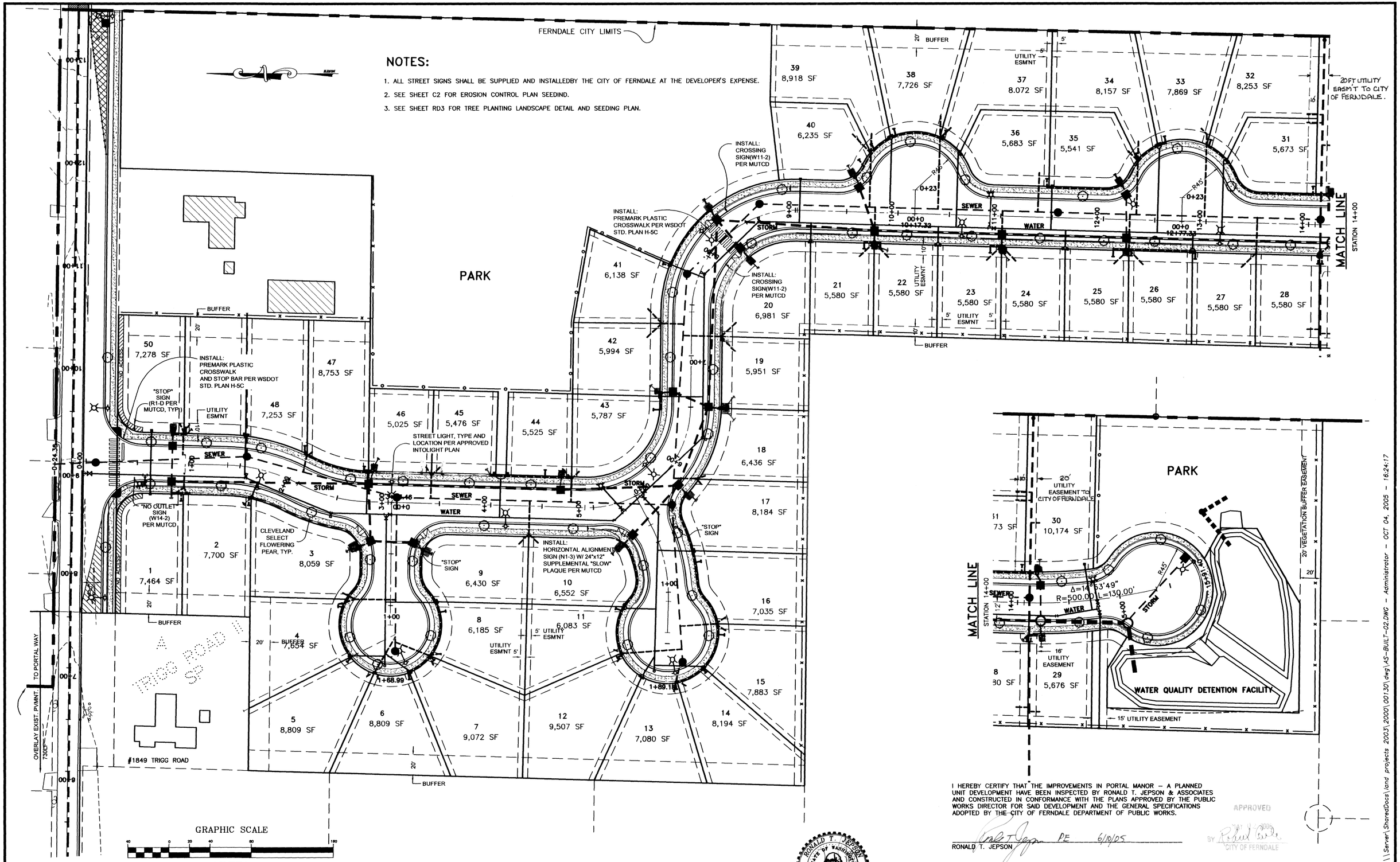

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RONALD T. JEPSON PE 6/10/05

APPROVED MAY 1 2006 BY CITY OF FERNDALE

AS BUILT

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	1"=40'-0"
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON STATE OF WASHINGTON 9361 REGISTERED PROFESSIONAL ENGINEER 6/10/05
1/25/2006

PORTAL MANOR
COMPOSITE UTILITY PLAN

CLIENT: WHATCOM SELF HELP HOMES

00130

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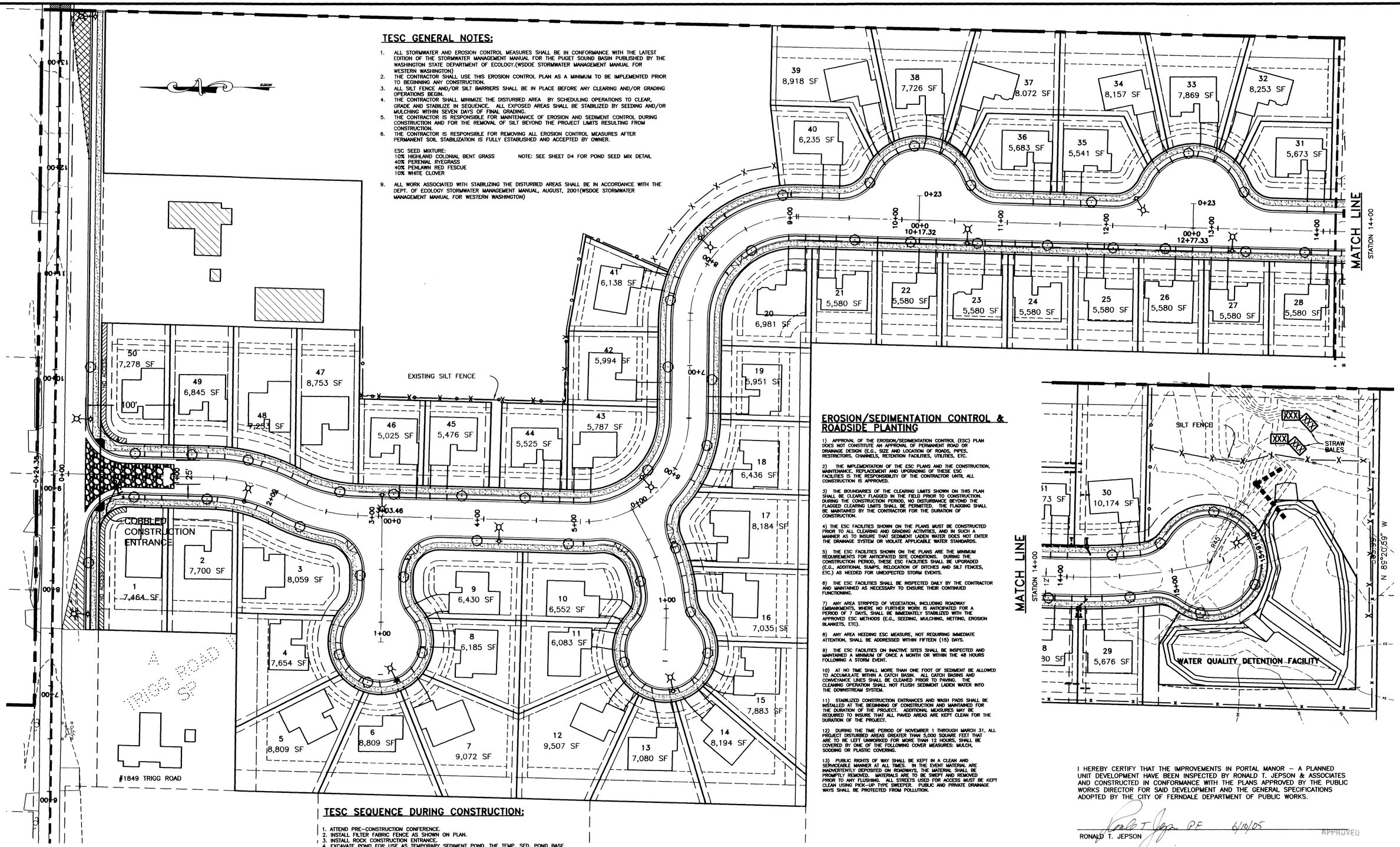
TESC GENERAL NOTES:

1. ALL STORMWATER AND EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE STORMWATER MANAGEMENT MANUAL FOR THE PUGET SOUND BASIN PUBLISHED BY THE WASHINGTON STATE DEPARTMENT OF ECOLOGY.(WSDOE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON)
2. THE CONTRACTOR SHALL USE THIS EROSION CONTROL PLAN AS A MINIMUM TO BE IMPLEMENTED PRIOR TO BEGINNING ANY CONSTRUCTION.
3. ALL SILT FENCE AND/OR SILT BARRIERS SHALL BE IN PLACE BEFORE ANY CLEARING AND/OR GRADING OPERATIONS BEGIN.
4. THE CONTRACTOR SHALL MINIMIZE THE DISTURBED AREA BY SCHEDULING OPERATIONS TO CLEAR, GRADE AND STABILIZE IN SEQUENCE. ALL EXPOSED AREAS SHALL BE STABILIZED BY SEEDING AND/OR MULCHING WITHIN SEVEN DAYS OF FINAL GRADING.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION AND FOR THE REMOVAL OF SILT BEYOND THE PROJECT LIMITS RESULTING FROM CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EROSION CONTROL MEASURES AFTER PERMANENT SOIL STABILIZATION IS FULLY ESTABLISHED AND ACCEPTED BY OWNER.

ESC SEED MIXTURE:
10% HIGHLAND COLONIAL BENT GRASS
40% PERENIAL RYEGRASS
40% PENLAWN RED FESCUE
10% WHITE CLOVER

NOTE: SEE SHEET D4 FOR POND SEED MIX DETAIL

9. ALL WORK ASSOCIATED WITH STABILIZING THE DISTURBED AREAS SHALL BE IN ACCORDANCE WITH THE DEPT. OF ECOLOGY STORMWATER MANAGEMENT MANUAL, AUGUST, 2001(WSDOE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON)



EROSION/SEDIMENTATION CONTROL & ROADSIDE PLANTING

1) APPROVAL OF THE EROSION/SEDIMENTATION CONTROL (ESC) PLAN 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.

2) THE IMPLEMENTATION OF THE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.

3) 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.

4) THE ESC FACILITIES SHOWN ON THE PLANS MUST BE CONSTRUCTED PRIOR TO 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.

5) THE ESC FACILITIES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS.

6) THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

7) 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 ESC METHODS (E.G., SEEDING, MULCHING, NETTING, EROSION BLANKETS, ETC).

8) ANY AREA NEEDING ESC MEASURE, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.

9) THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT.

10) 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.

11) 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.

12) DURING THE TIME PERIOD OF NOVEMBER 1 THROUGH MARCH 31, 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.

13) PUBLIC RIGHTS OF WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE MANNER AT ALL TIMES. IN THE EVENT MATERIAL ARE INADVERTENTLY DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEPT AND REMOVED PRIOR TO ANY FLUSHING. ALL STREETS USED FOR ACCESS MUST BE KEPT CLEAN USING PICK-UP TYPE SWEEPER. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION.

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

Ronald T. Jepson PE 6/10/05
RONALD T. JEPSON

APPROVED
MAY 02 2006
BY
CITY OF FERNDALE

TESC SEQUENCE DURING CONSTRUCTION:

1. ATTEND PRE-CONSTRUCTION CONFERENCE.
2. INSTALL FILTER FABRIC FENCE AS SHOWN ON PLAN.
3. INSTALL ROCK CONSTRUCTION ENTRANCE.
4. EXCAVATE POND FOR USE AS TEMPORARY SEDIMENT POND. THE TEMP. SED. POND BASE ELEVATION SHALL BE 6 INCHES BELOW DETENTION POND BASE AS DESIGNED.
5. GRADE BIOFILTRATION SWALE AND DIVERSION DITCH AS CONVEYANCE TO THE POND AND INSTALL SILT BARRIERS.
6. CLEAR AS NECESSARY FOR CONSTRUCTION AND COMMENCE GRADING OPERATIONS.
7. INSTALL UTILITY LINES AND STORM DRAIN/FLOW CONTROL STRUCTURE(MH ONLY).
8. FINE GRADE POND AND INSTALL FLOW CONTROL IN THE MANHOLE.
9. CLEAN AND REMOVE ALL SILT AND DEBRIS FROM THE DITCH/SWALE/POND. REMOVE ALL TEMP. FEATURES AND PLACE PERMANENT SYSTEM IN OPERATION.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	1"=40'-0"
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON
STATE OF WASHINGTON
9361
REGISTERED PROFESSIONAL ENGINEER
6/10/05
EXPIRES 1/25/2006

PORTAL MANOR
EROSION CONTROL PLAN

CLIENT:
WHATCOM SELF HELP HOMES

AS BUILT
00130

C2

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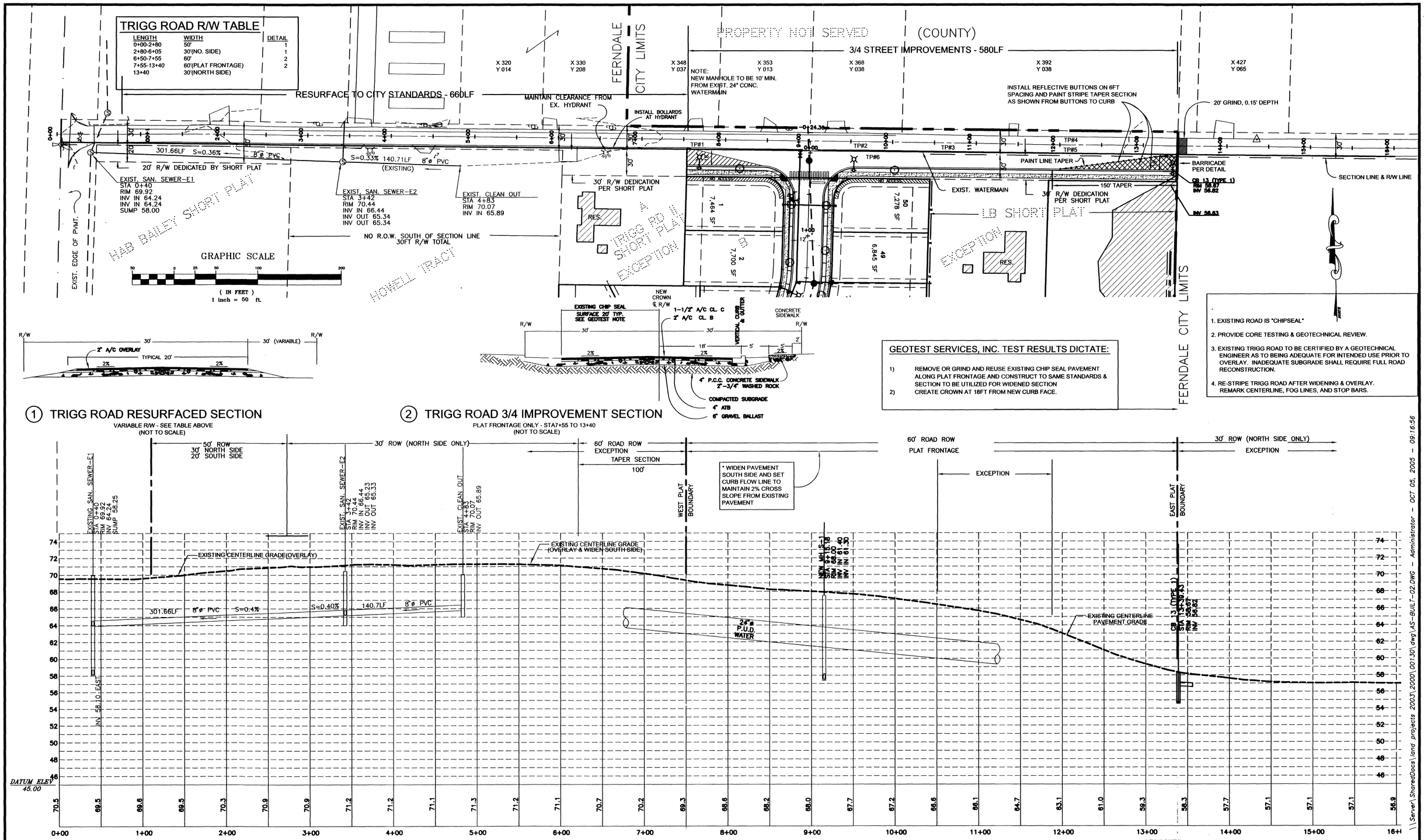
00323.000 5.9.06 KR

TRIGG ROAD R/W TABLE

LENGTH	WIDTH	DETAIL
0+00-2+80	50'	1
2+80-6+05	30'(NO. SIDE)	1
6+50-7+55	60'	2
7+55-13+40	60'(PLAT FRONTAGE)	2
13+40	30'(NORTH SIDE)	



1. EXISTING ROAD IS "CHIPSEAL"
2. PROVIDE CORE TESTING & GEOTECHNICAL REVIEW.
3. EXISTING TRIGG ROAD TO BE CERTIFIED BY A GEOTECHNICAL ENGINEER AS TO BEING ADEQUATE FOR INTENDED USE PRIOR TO OVERLAY. INADEQUATE SUBGRADE SHALL REQUIRE FULL ROAD RECONSTRUCTION.
4. RE-STRIPE TRIGG ROAD AFTER WIDENING & OVERLAY. REMARK CENTERLINE, FOG LINES, AND STOP BARS.

GEOTEST SERVICES, INC. TEST RESULTS DICTATE:

1) REMOVE OR GRIND AND REUSE EXISTING CHIP SEAL PAVEMENT ALONG PLAT FRONTAGE AND CONSTRUCT TO SAME STANDARDS & SECTION TO BE UTILIZED FOR WIDENED SECTION
2) CREATE CROWN AT 18FT FROM NEW CURB FACE.

1 TRIGG ROAD RESURFACED SECTION

VARIABLE R/W - SEE TABLE ABOVE
(NOT TO SCALE)

2 TRIGG ROAD 3/4 IMPROVEMENT SECTION

PLAT FRONTAGE ONLY - STA7+55 TO 13+40
(NOT TO SCALE)

TRIGG ROAD ALIGNMENT & SANITARY SEWER PROFILE

HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

Ronald T. Jepson PE 6/10/05
RONALD T. JEPSON

SCALE	NA
DRAWN BY	P.T.J.
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	08-22-2005

REVISION
REDLINE 4-9-2003

RONALD T. JEPSON STATE OF WASHINGTON 9367 REGISTERED PROFESSIONAL ENGINEER 6/10/05
EXPIRES 1/25/2006

APPROVED MAY 12 2006 BY CITY OF FERNDALE

AS BUILT

TRIGG ROAD
ROAD ALIGNMENT
& SEWER PLAN/PROFILE

CLIENT: WHATCOM SELF HELP HOMES

00130

RD1

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

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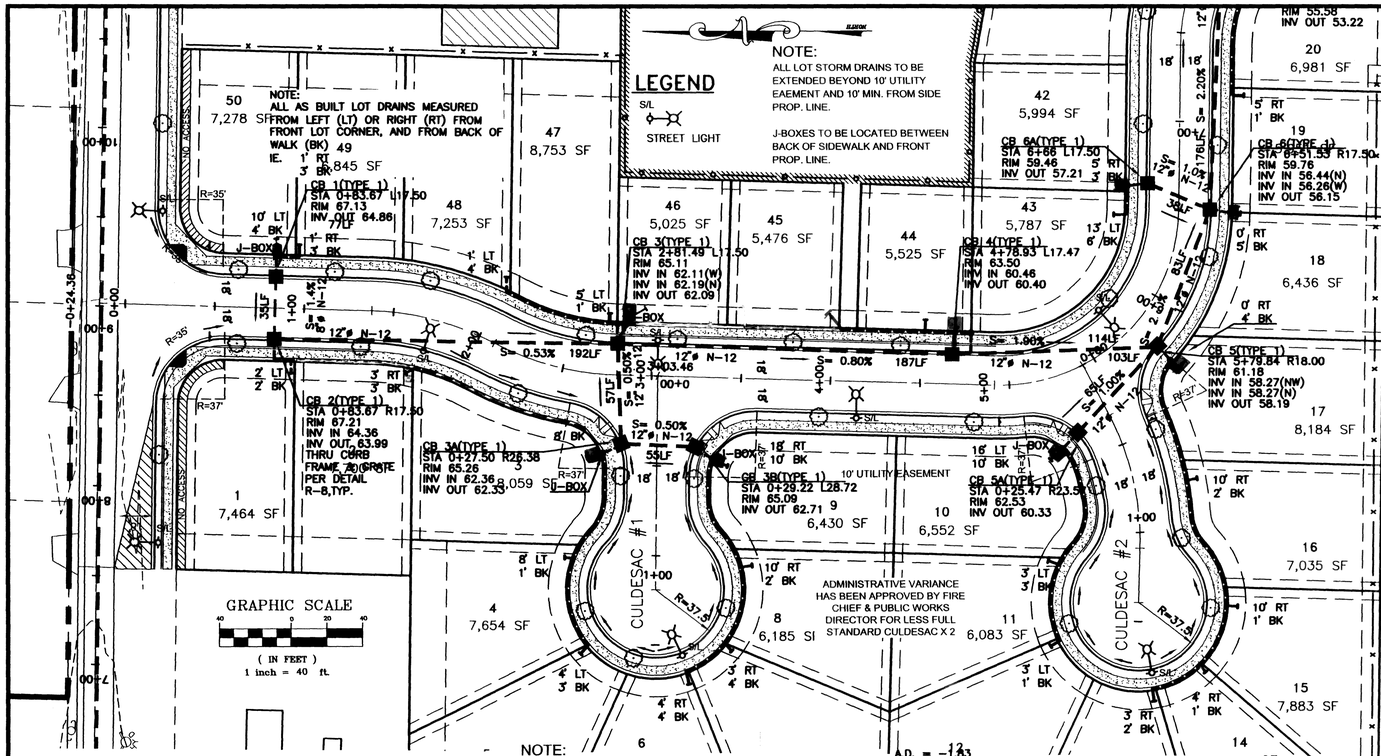
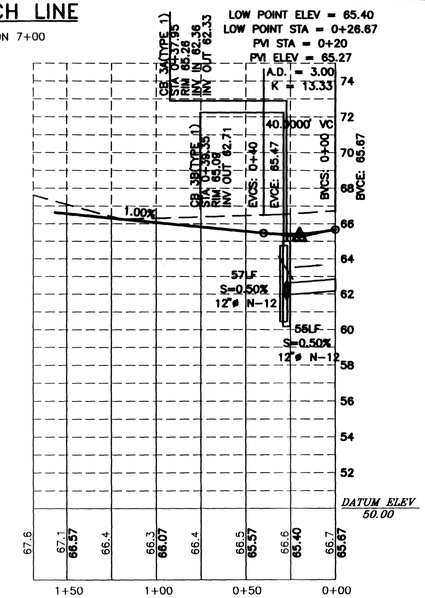


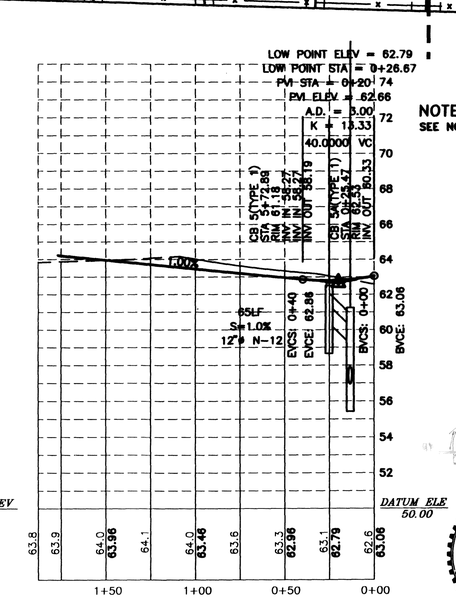
MATCH LINE

STATION 7+00



CULDESAC 1 PROFILE

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'



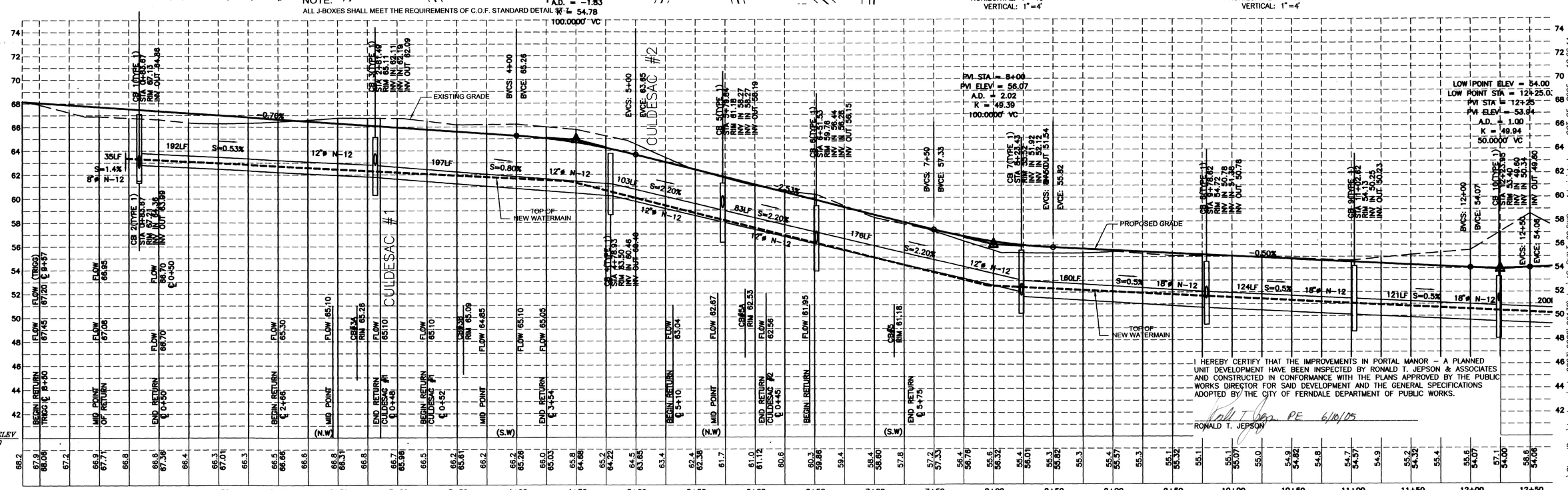
CULDESAC 2 PROFILE

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'

NOTE:
SEE NOTES ON SHEET RD3

APPROVED
MAY 02 2006
CITY OF FERNDALE

RONALD T. JEPSON
STATE OF WASHINGTON
9361
REGISTERED
PROFESSIONAL ENGINEER
1/25/2006



I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES AND CONSTRUCTED IN CONFORMANCE WITH THE PLANS APPROVED BY THE PUBLIC WORKS DIREGTOR FOR SAID DEVELOPMENT AND THE GENERAL SPECIFICATIONS ADOPTED BY THE CITY OF FERNDALE DEPARTMENT OF PUBLIC WORKS.

RONALD T. JEPSON, PE 6/10/05

MATCH LINE

STATION 7+00

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'

AS BUILT

00130

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

PORTAL MANOR
STORM DRAINAGE SYSTEM AND ROAD PLAN AND PROFILE

CLIENT:
WHATCOM SELF HELP HOMES

RD2

00323.008 5-9-06

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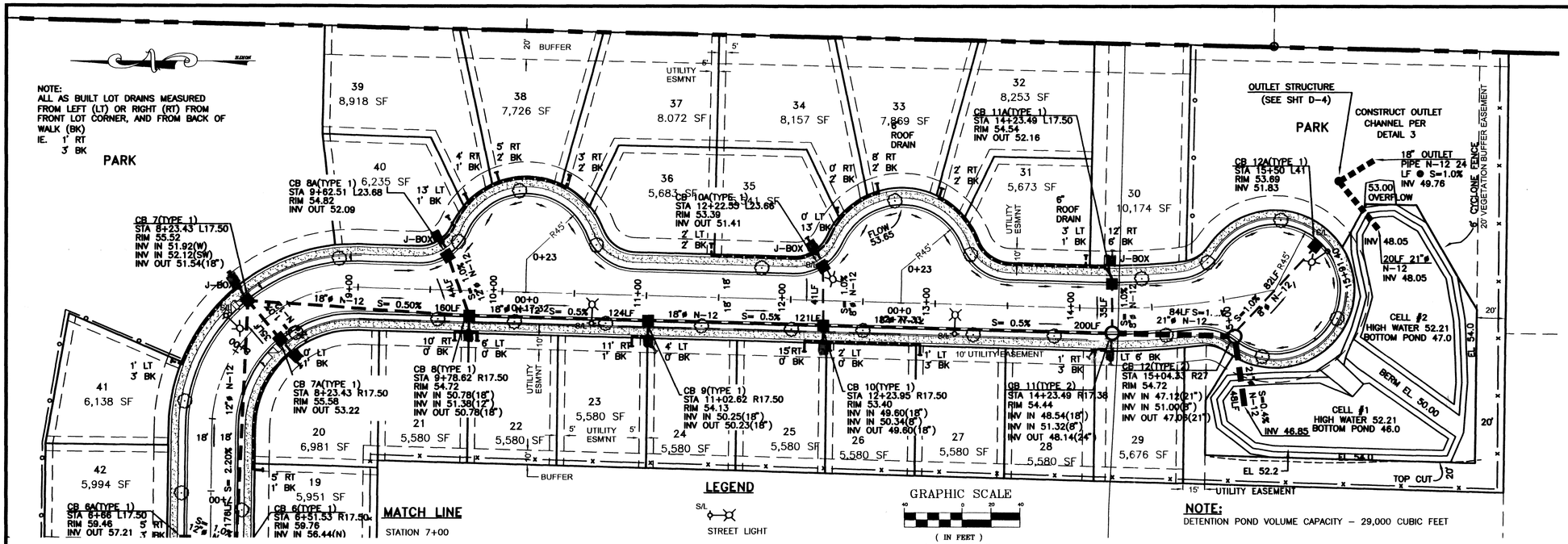
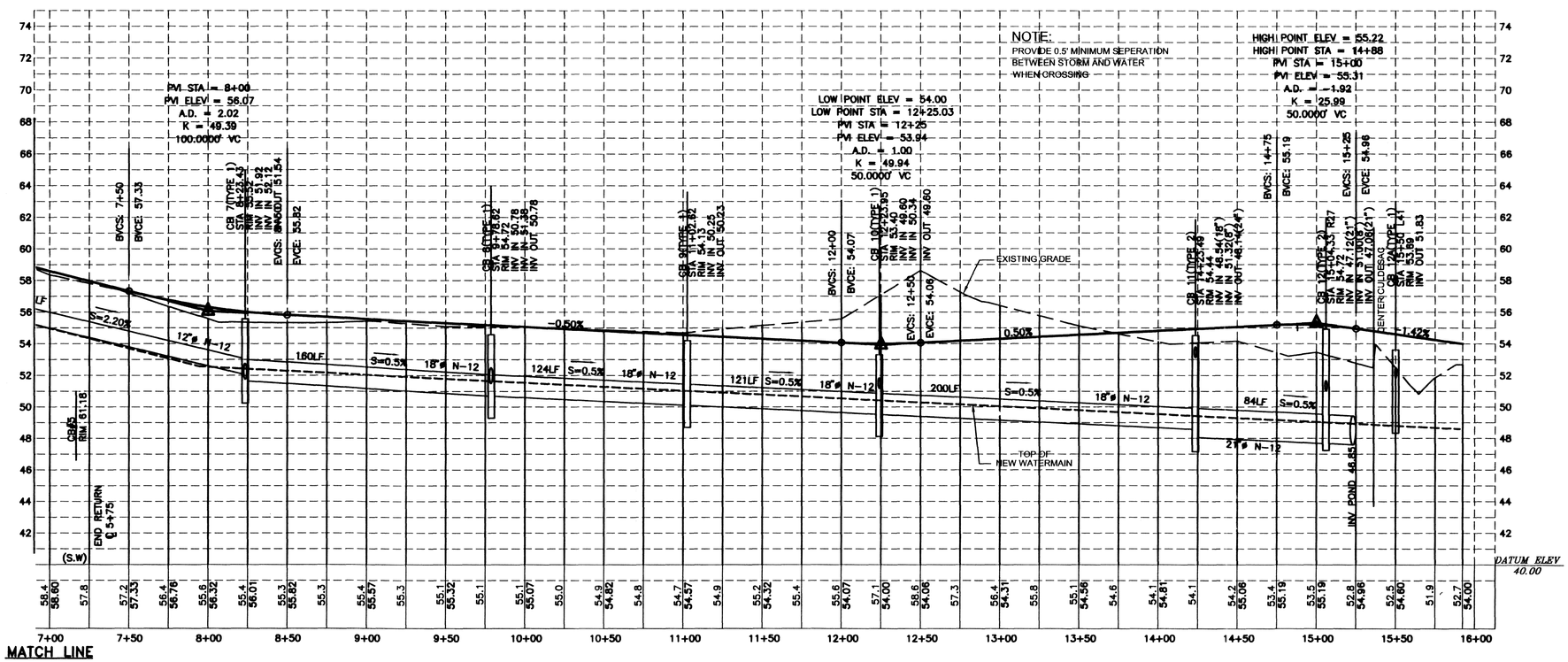
PLANTERSTRIP STREET TREE



NOTE:
DETENTION POND VOLUME CAPACITY – 29,000 CUBIC FEET



MATCH LINE
STATION 7+00

NEW ROAD PROFILE
HORIZONTAL: 1"=40'
VERTICAL: 1"=4'

*STREET SECTION SHALL CONFORM WITH CITY OF FERNDALE STANDARD (R-4) - *SEE DETAIL SHT D-1

NOTE:
ALL LOT STORM DRAINS TO BE EXTENDED BEYOND 10' UTILITY EAEMENT AND 10' MIN. FROM SIDE PROP. LINE.

J-BOXES TO BE LOCATED BETWEEN BACK OF SIDEWALK AND FRONT PROP. LINE. SEE DETAIL ST-7 ON SHEET D2.

BACK OF WALK STORM LINES TO BE 6" PVC, SLOPE AT 0.5%.

PVC STORM PIPE SHALL MEET THE REQUIREMENTS OF WSDOT 9-05.12(1).

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

APPROVED
BY CITY OF FERNDALE

RONALD T. JEPSON PE 6/10/05

AS BUILT

00130

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	AS SHOWN
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON STATE OF WASHINGTON 9081 REGISTERED PROFESSIONAL ENGINEER 6/10/05
1/25/2006

PORTAL MANOR
STORM DRAINAGE SYSTEM & ROAD PLAN AND PROFILE

CLIENT: WHATCOM SELF HELP HOMES

RD3

00323.009 5-9-06

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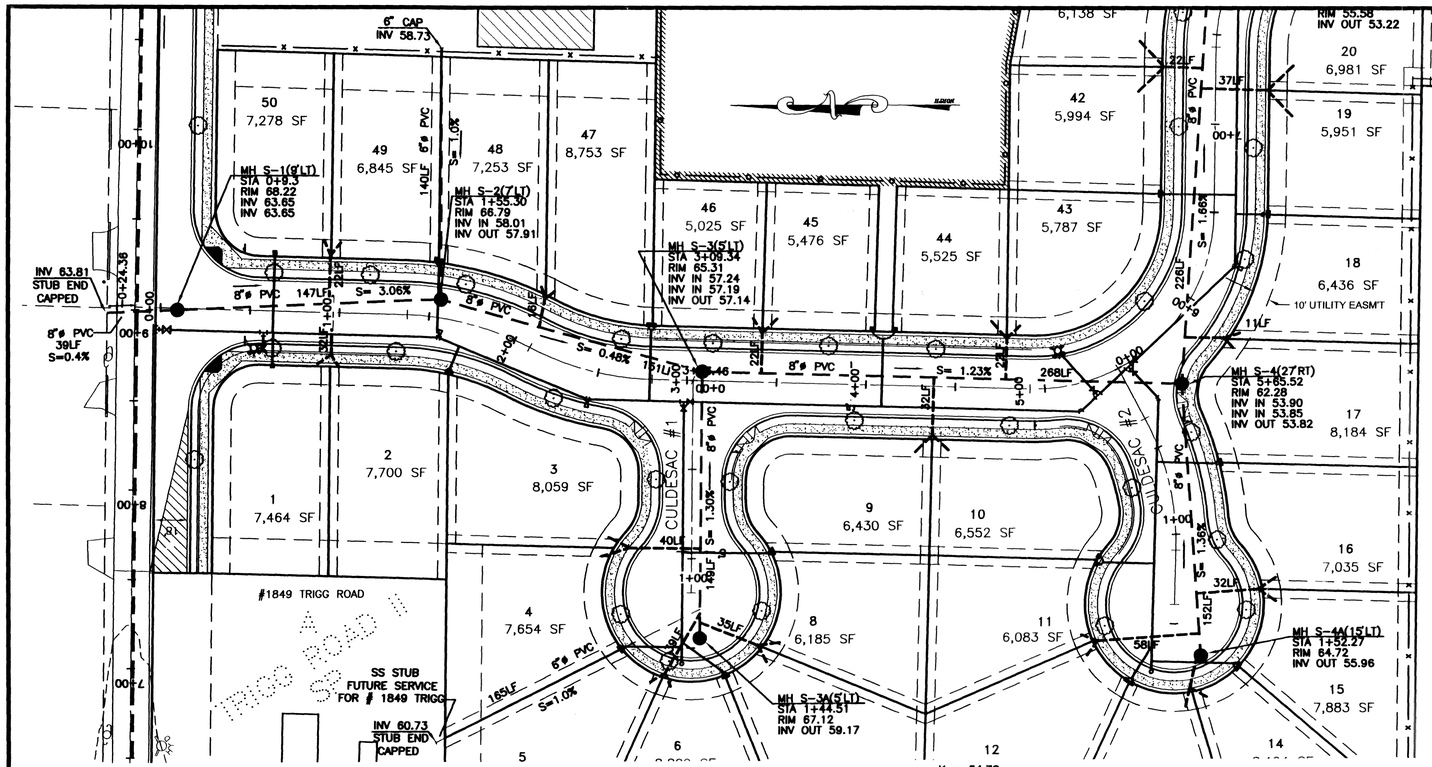
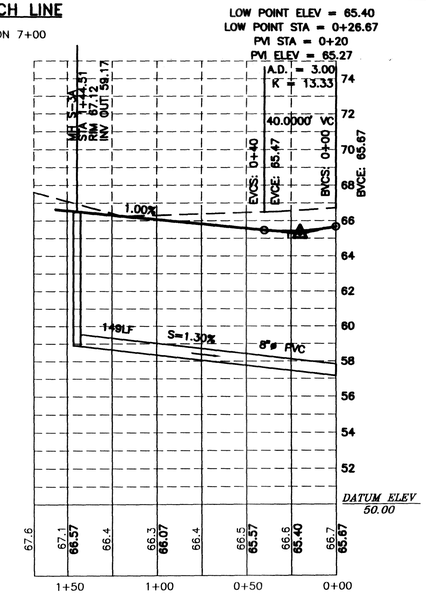


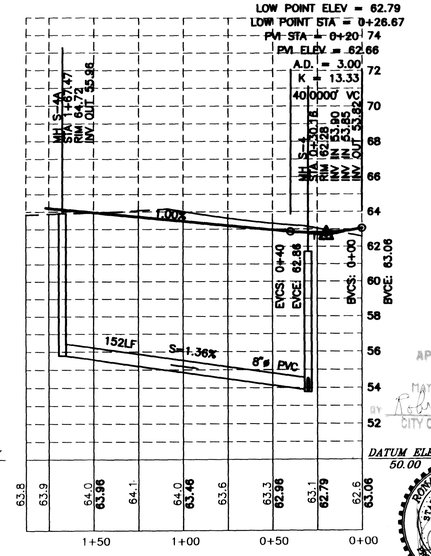
MATCH LINE

STATION 7+00



CULDESAC #1 PROFILE

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'



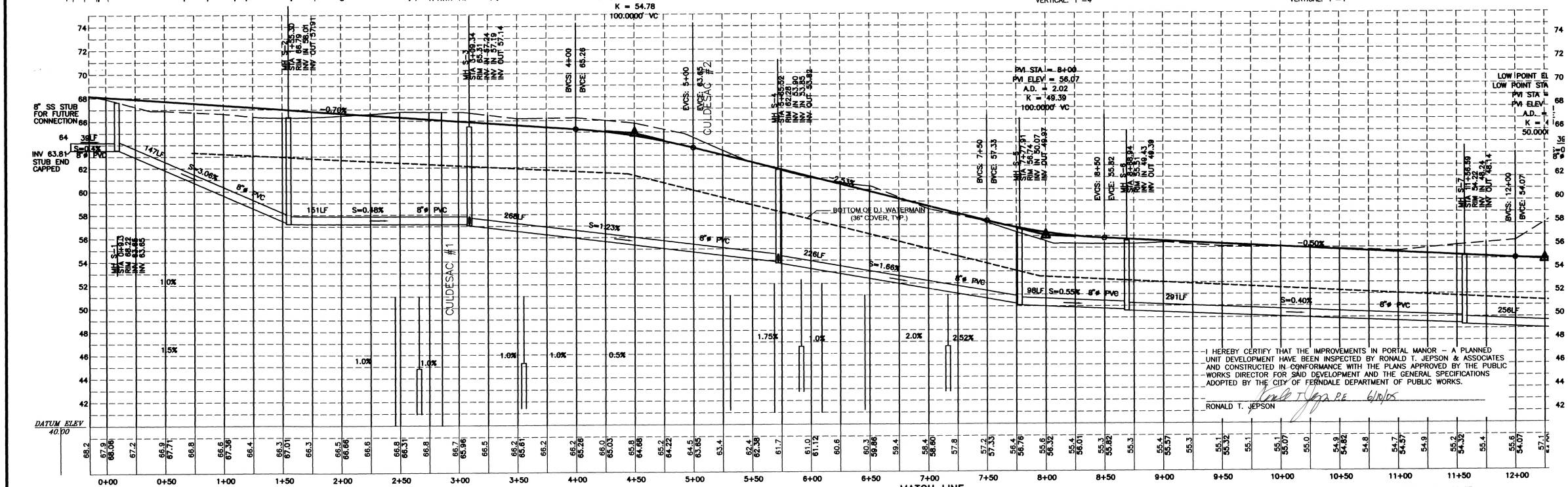
CULDESAC #2 PROFILE

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'

APPROVED
MAY 02 2006
BY
CITY OF FERNDALE

RONALD T. JEPSON
STATE OF WASHINGTON
9361
REGISTERED
PROFESSIONAL ENGINEER
6/10/05

1/25/2006



I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

Ronald T. Jepson P.E. 6/10/05

RONALD T. JEPSON

MATCH LINE

STATION 7+00

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'

AS BUILT

00130

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	AS SHOWN
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

PORTAL MANOR
SANITARY SEWER SYSTEM PLAN AND PROFILE

CLIENT:
WHATCOM SELF HELP HOMES

S1

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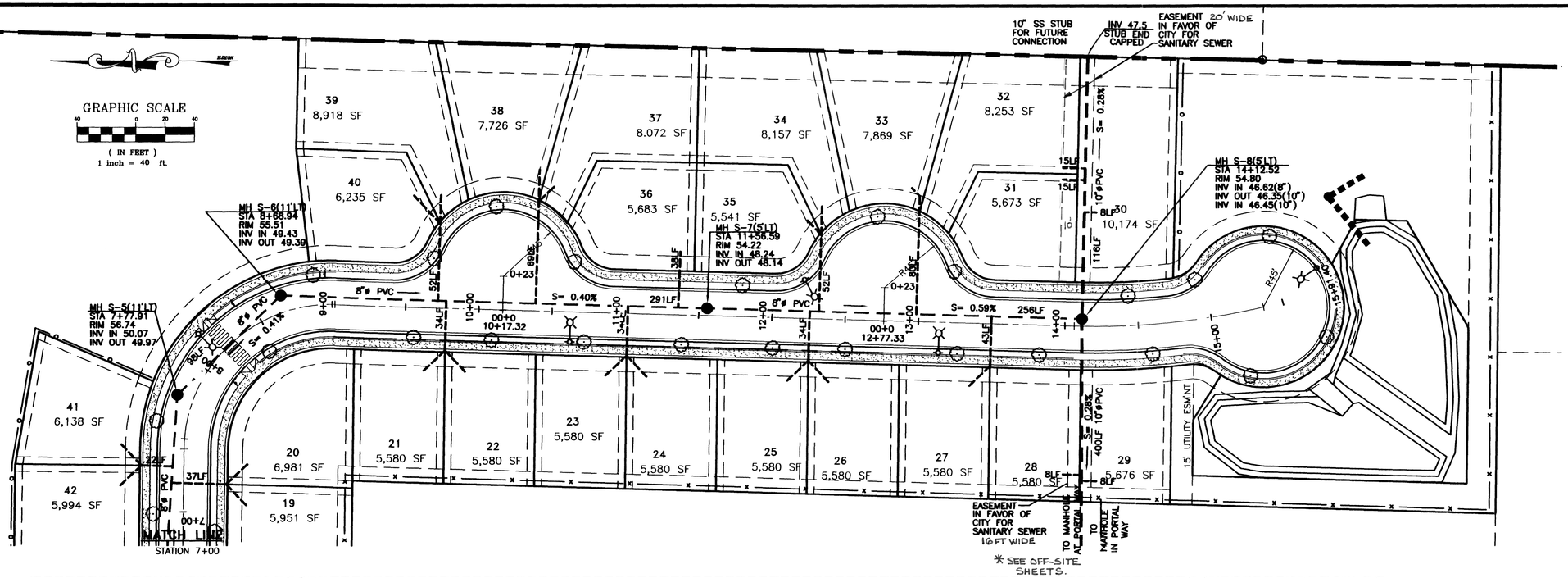

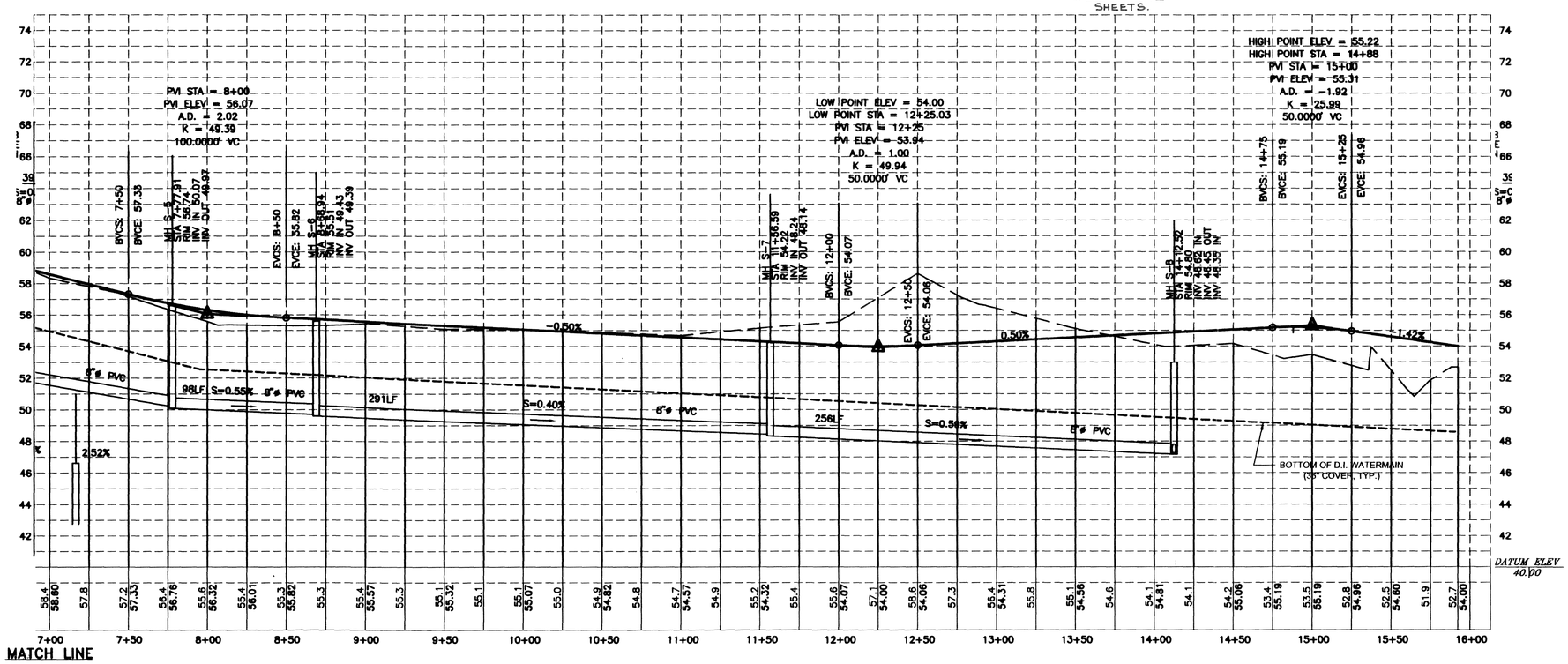

SANITARY SEWER SYSTEM PROFILE

HORIZONTAL: 1"=40'
VERTICAL: 1"=4'

APPROVED
MAY 26 2005
BY
CITY OF FERNDALE

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

RONALD T. JEPSON, P.E. 6/10/05

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	AS SHOWN
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

STATE OF WASHINGTON — RONALD T. JEPSON — 9361 — REGISTERED PROFESSIONAL ENGINEER — 6/10/05
EXPIRES 1/25/2006

PORTAL MANOR
SANITARY SEWER SYSTEM PLAN AND PROFILE

AS BUILT

CLIENT: WHATCOM SELF HELP HOMES

00130

S2

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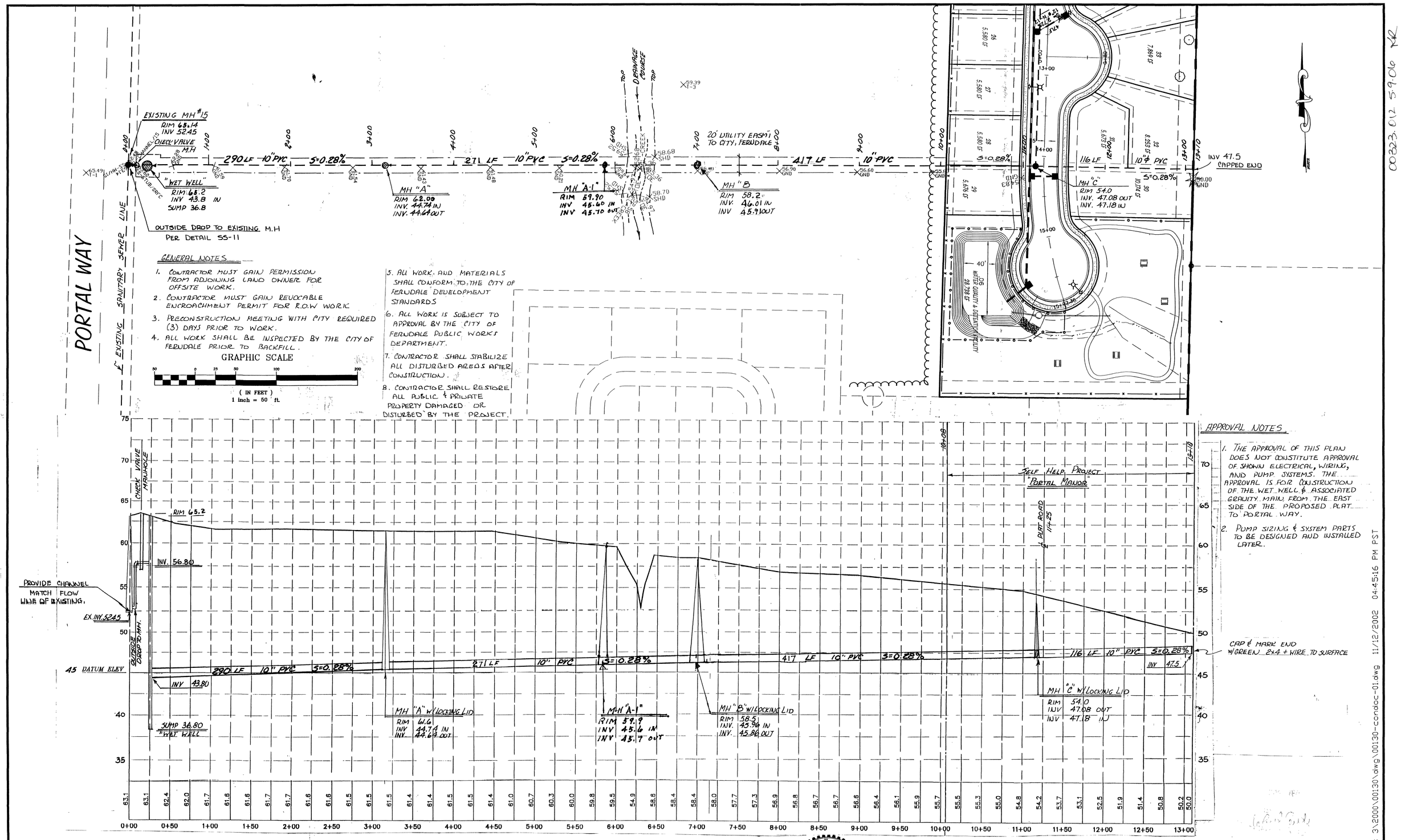

TRIGG ROAD ALIGNMENT & SANITARY SEWER PROFILE

HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

"AS BUILT"

00130

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	NA
DRAWN BY	P.T.J.
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	04-15-2002

REVISION

RONALD T. JEPSON STATE OF WASHINGTON 9361 REGISTERED PROFESSIONAL ENGINEER

Feb 27.06

EXPIRES 1/25/2004

OFFSITE
SANITARY SEWER LINE
AND PORTAL WAY LIFT STATION

CLIENT:
WHATCOM SELF HELP HOMES

S-3

C:\Land Projects 3\2000\00130\dwg\00130-condoc-01.dwg 11/12/2002 04:45:16 PM PST

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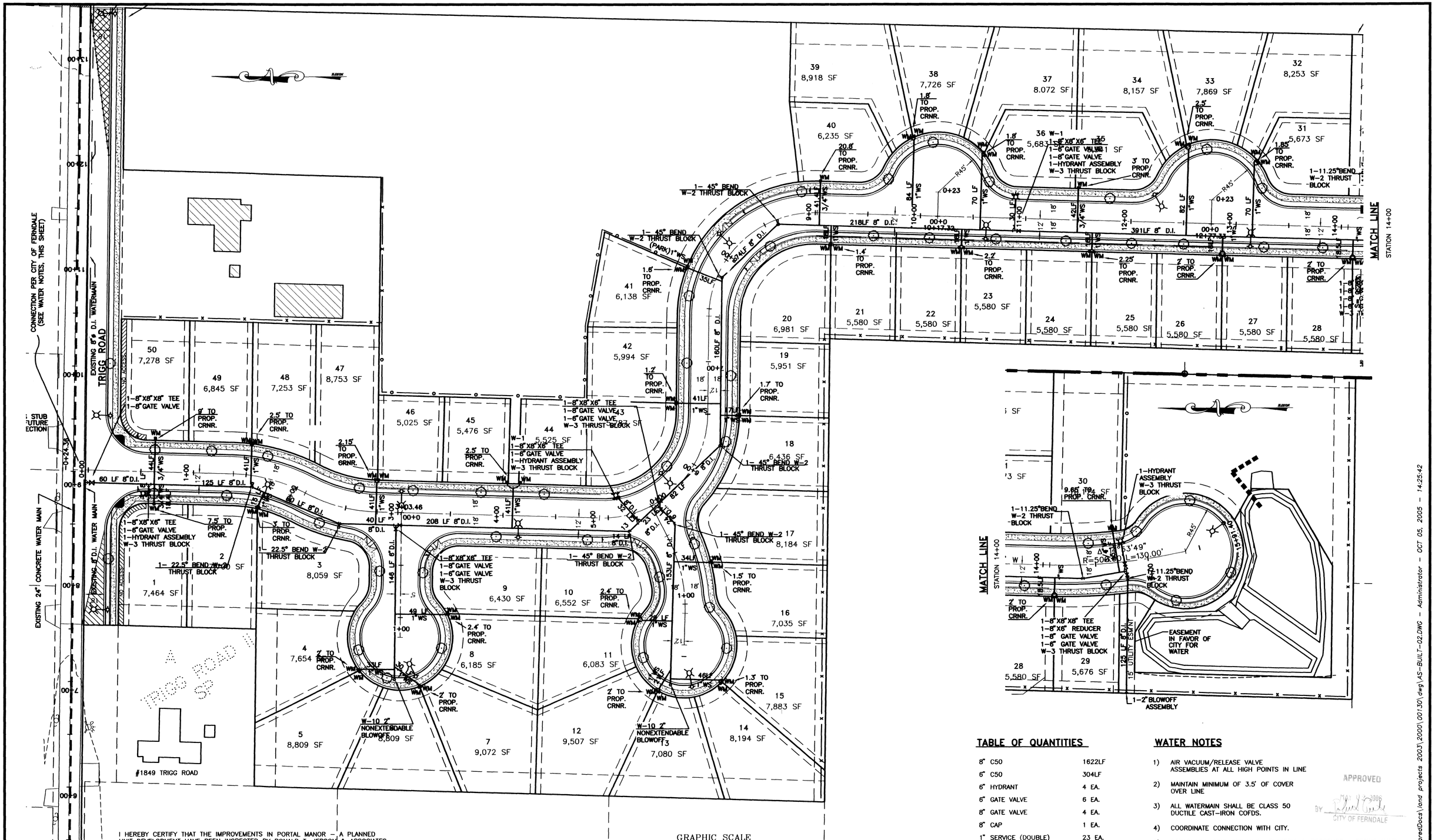

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES AND CONSTRUCTED IN CONFORMANCE WITH THE PLANS APPROVED BY THE PUBLIC WORKS DIRECTOR FOR SAID DEVELOPMENT AND THE GENERAL SPECIFICATIONS ADOPTED BY THE CITY OF FERNDALE DEPARTMENT OF PUBLIC WORKS.

Ronald T. Jepson PE 6/10/05

RONALD T. JEPSON

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	AS SHOWN
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

STATE OF WASHINGTON — RONALD T. JEPSON — 8361 — REGISTERED PROFESSIONAL ENGINEER — 6/10/05

1/25/2006

TABLE OF QUANTITIES

8" C50	1622LF
6" C50	304LF
6" HYDRANT	4 EA.
6" GATE VALVE	6 EA.
8" GATE VALVE	4 EA.
8" CAP	1 EA.
1" SERVICE (DOUBLE)	23 EA.
3/4" SERVICE (SINGLE)	6 EA.
2" BLOWOFF	2 EA.

WATER NOTES

1) AIR VACUUM/RELEASE VALVE ASSEMBLIES AT ALL HIGH POINTS IN LINE

2) MAINTAIN MINIMUM OF 3.5' OF COVER OVER LINE

3) ALL WATERMAIN SHALL BE CLASS 50 DUCTILE CAST-IRON COFDS.

4) COORDINATE CONNECTION WITH CITY.

5) SEPERATION REQUIRED UNTIL BACTERIA & PRESSURE TESING HAVE PASSED.

6) CONTRACTOR TO MAKE CONNECTION IN THE PRESENCE OF CITY INSPECTOR.

APPROVED MAY 1 2 2006 BY CITY OF FERNDALE

AS BUILT

00130

PORTAL MANOR
WATER SYSTEM PLAN

CLIENT: WHATCOM SELF HELP HOMES

W1

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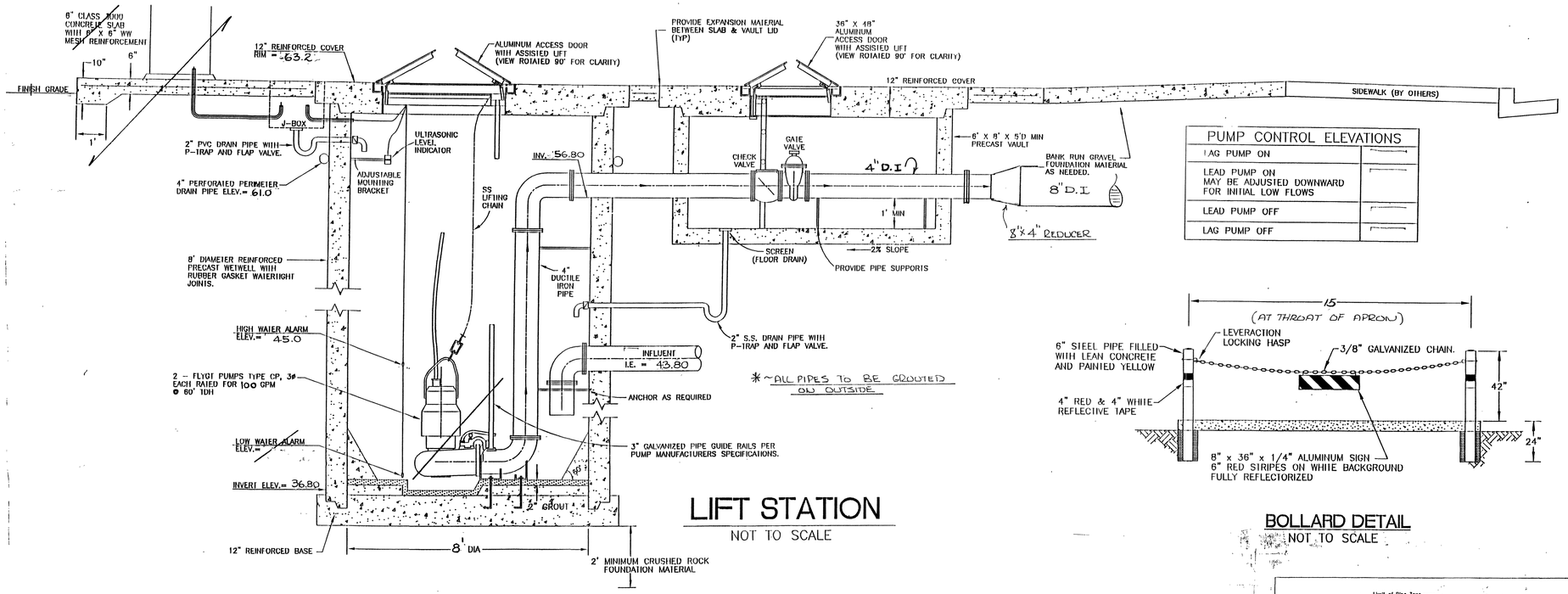


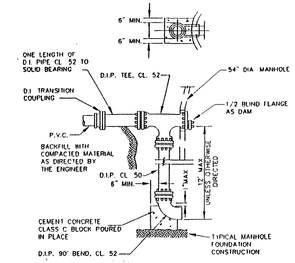
LIFT STATION

NOT TO SCALE

PUMP CONTROL ELEVATIONS	
LAG PUMP ON	
LEAD PUMP ON MAY BE ADJUSTED DOWNWARD FOR INITIAL LOW FLOWS	
LEAD PUMP OFF	
LAG PUMP OFF	

BOLLARD DETAIL

NOT TO SCALE



OUTSIDE DROP STRUCTURE

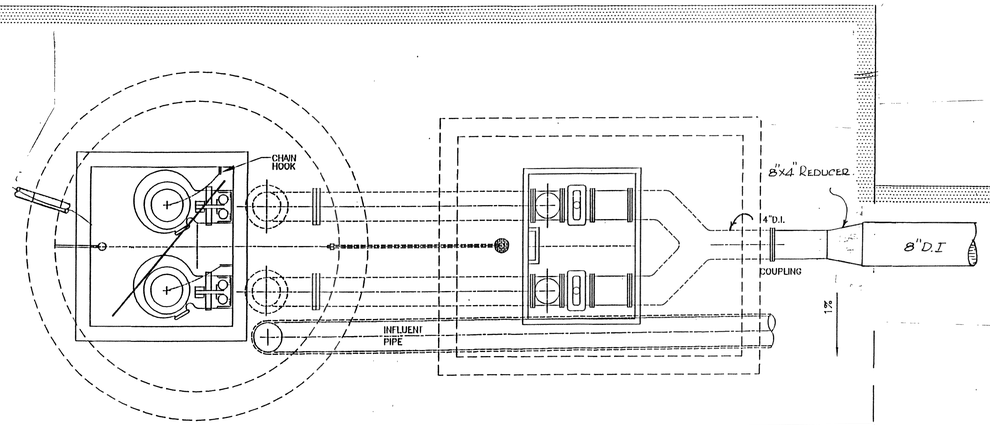
NOT TO SCALE

NOTE:
INSIDE DROP STRUCTURE PERMITTED ONLY BY SPECIAL APPROVAL BY PUBLIC WORKS DIRECTOR.
INSIDE DROP STRUCTURE LIMITED TO 54" DIA. MANHOLE AND SHALL BE BOUND IN PLACE BY STAINLESS STEEL BANDS 2' O/C

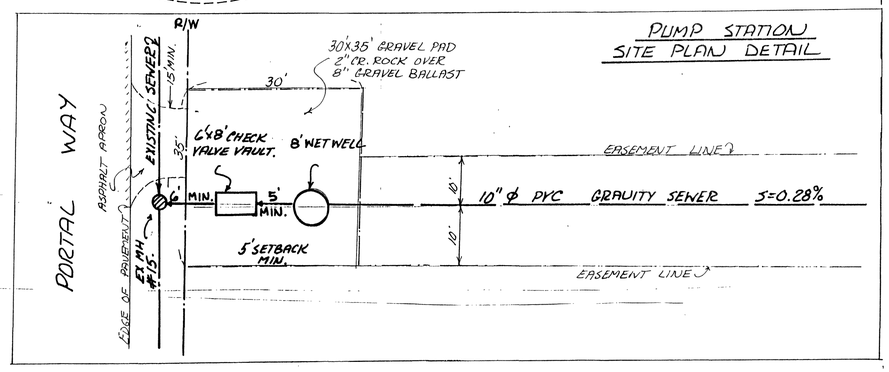
NOT TO SCALE

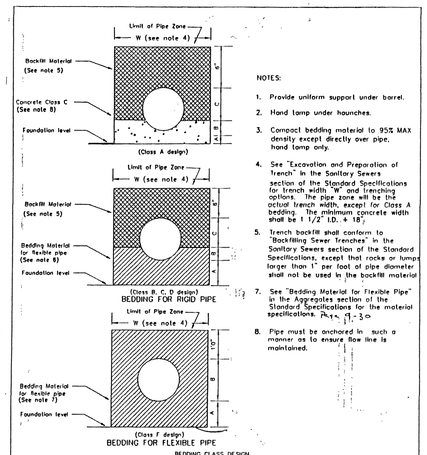
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	OUTSIDE DROP STRUCTURE	SS-11

JUNE 1995 — 2091SE3A/SS-11



PUMP STATION SITE PLAN DETAIL





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. Page 9-30
8. Pipe must be anchored in such a manner as to ensure flow line is maintained.

BEDDING CLASS DESIGN

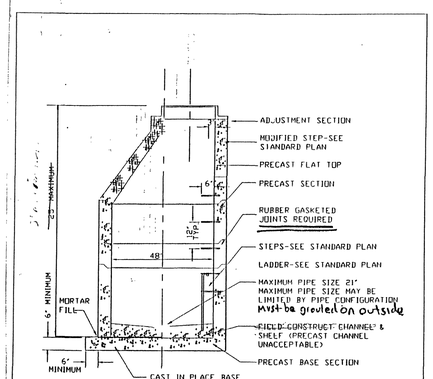
DIMENSION	CLASS A 1/4" MIN. TO 1/2" MAX	CLASS B	CLASS C	CLASS D	CLASS F
A	*	*	*	*	*
B	1/4 O.D.	1/2 O.D.	1/8 O.D.	Zero	O.D.
C	3/4 O.D.	1/2 O.D.	1/8 O.D.	O.D.	O.D.

*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



TYPE I - 48" MANHOLE

NTS

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	TYPE 1 48" MANHOLE	SS-2

JANUARY 1993

APPROVED

RONALD T. JEPSON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 15 — 10/97

Aug 10, 02 — Feb 27, 04

REVISION 1/25/2004

"AS BUILT"

SANITARY SEWER PUMP STATION

CLIENT: WHATCOM SELF HELP HOMES

S-4

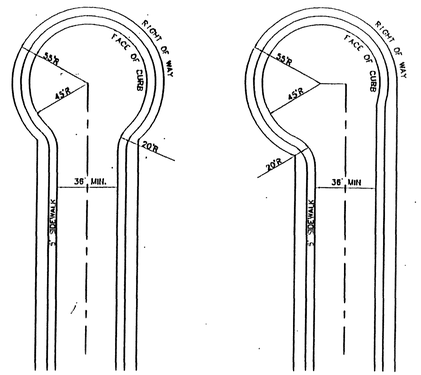
SCALE	NA
DRAWN BY	P.T.J.
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	04-15-2002

REVISION

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

C:\Land Projects 3\2000\00130\dwg\00130-cordc-01.dwg 08/02/2002 01:40:40 PM PDT

00822.014 S.T.O.C.



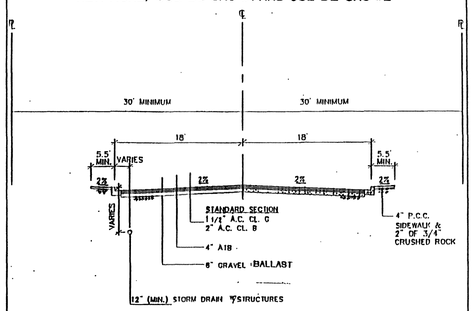
MAXIMUM CUL-DE-SAC LENGTH IS 500'.

NOT TO SCALE

APPROVED Public Works Director Date	CITY OF FERNDALE TYPICAL AND OPTIONAL CUL DE SAC	DRAWING R-5

CROSS SECTION

NEW ROAD, CUL-DE-SAC #1 AND CUL-DE-SAC #2



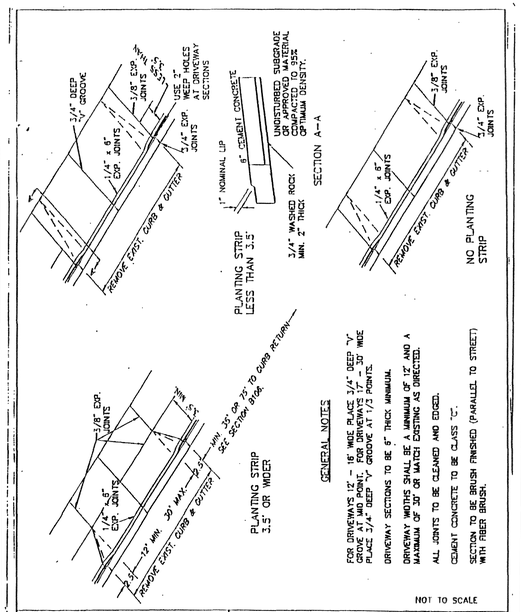
THE PUBLIC WORKS DIRECTOR MAY CONSIDER ALTERNATE PAVEMENT SECTIONS DESIGNED BY A LICENSED GEOTECHNICAL ENGINEER.

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

NOT TO SCALE

APPROVED Public Works Director Date	CITY OF FERNDALE MINIMUM STANDARD ASPHALT CONCRETE SECTION LOCAL STREET	DRAWING R-4

2091801A/R-4



GENERAL NOTES

FOR DRIVEWAYS 12' - 18' WIDE PLACE 3/4" DEEP "V" GROOVE AT 1/4 POINTS AND 30" WIDE PLACE 3/4" DEEP "V" GROOVE AT 1/3 POINTS.

DRIVEWAY SECTIONS TO BE 6" THICK MINIMUM.

DRIVEWAY WIDTHS SHALL BE A MINIMUM OF 12' AND A MAXIMUM OF 30' OR MATCH EXISTING AS DIRECTED.

ALL JOINTS TO BE CLEANED AND EDGED.

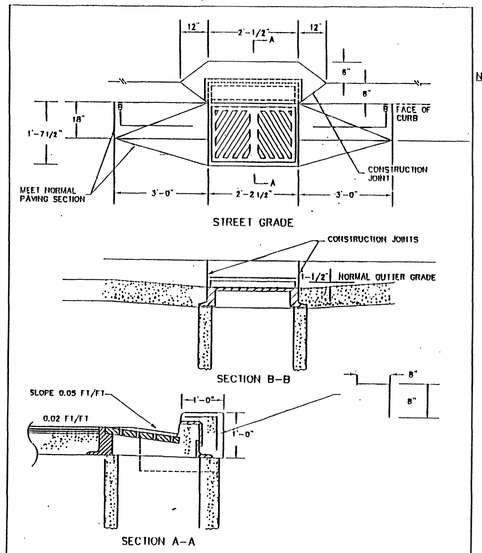
CEMENT CONCRETE TO BE CLASS "C".

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

NOT TO SCALE

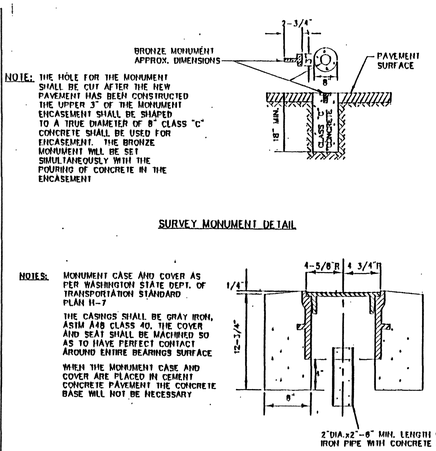
APPROVED Public Works Director Date	CITY OF FERNDALE MINIMUM STANDARD DRIVEWAY SECTIONS	DRAWING F-6

JANUARY 1993



NOT TO SCALE

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



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

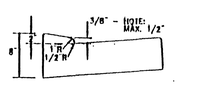
THE CASINGS SHALL BE GRAY IRON, ASTM A48 CLASS 40. THE COVER AND SEAT SHALL BE MACHINED SO AS TO HAVE PERFECT CONTACT AROUND ENTIRE BEARINGS SURFACE

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

SURVEY MONUMENT AND CASE DETAILS

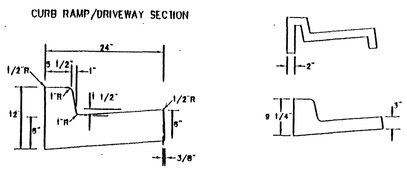
NOT TO SCALE

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



CURB RAMP/DRIVEWAY SECTION

CONTRACTION JOINTS



TYPICAL CURB SECTION

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 3/18" 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.

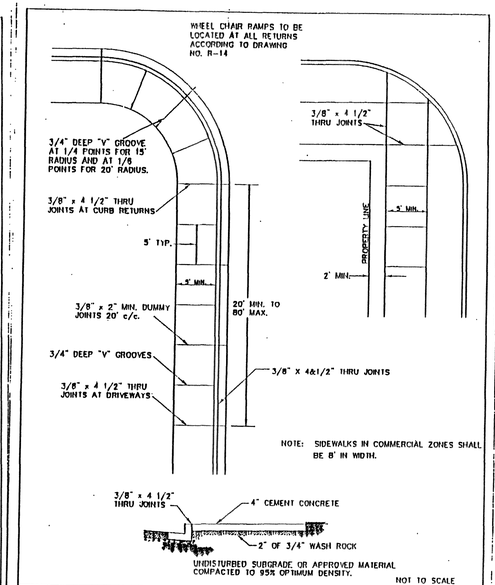
EXPOSED SURFACES SHALL BE BRUSHED WITH A FIBER BRUSH.

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.

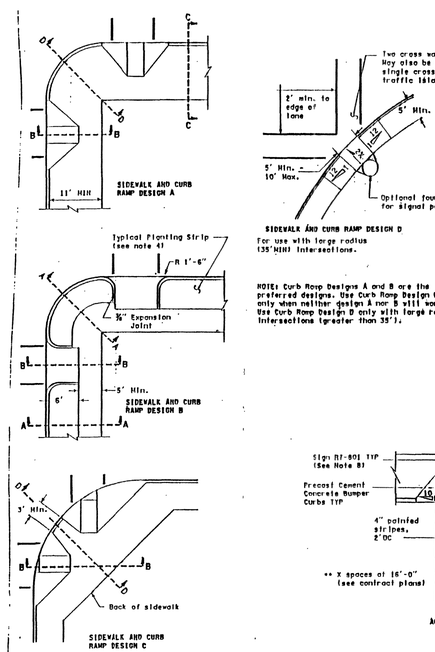
NOT TO SCALE

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

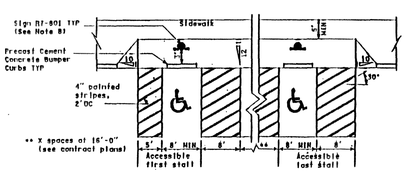


NOT TO SCALE

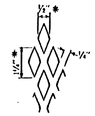
APPROVED Public Works Director Date	CITY OF FERNDALE TYPICAL SIDEWALK PLAN AND CROSS SECTION	DRAWING R-12



NOTE: Curb Ramp Designs A and B are the preferred designs. Use Curb Ramp Design C only when neither design A nor B will work. Use Curb Ramp Design D only with large radius intersections (greater than 35').



ACCESSIBLE PARKING SHOWN WITH CONTINUOUS CURB RAMP



* Nominal dimensions

RAMP TEXTURE DETAIL

CEMENT CONCRETE SIDEWALK AND APPROACH DETAILS

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON

APPROVED MONTH DAY, YEAR

STANDARD PLAN F-3

Sheet 1 of 2

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR - A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

RONALD T. JEPSON Nov 21 05

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	NA
DRAWN BY	P.T.J.
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

1/28/2006

AS BUILT

Ronald T. Jepson PE 6/10/05

ROAD DETAILS

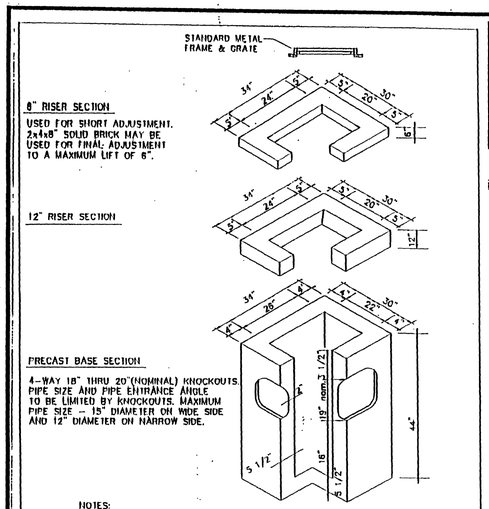
CLIENT: WHATCOM SELF HELP HOMES

00130

D1

C:\Land Projects 3\2000\00130\dwg\00130-condoc-01.dwg 07/30/2002 12:26:20 PM PDT

00233 OS 69 04 AM



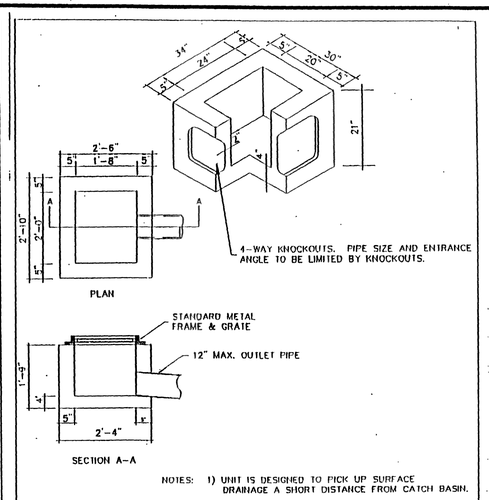
NOTES:

1) CAST IN PLACE OR MASONRY CONSTRUCTION UNITS MAY BE SUBSTITUTED AS PER A.P.W.A. STANDARDS OR STATE STANDARDS. (B-1)

2) FOR DETAILS OF REINFORCEMENTS AND INSTALLATION, SEE A.P.W.A. STANDARDS OR STATE STANDARDS.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	CATCH BASIN TYPE I	ST-1



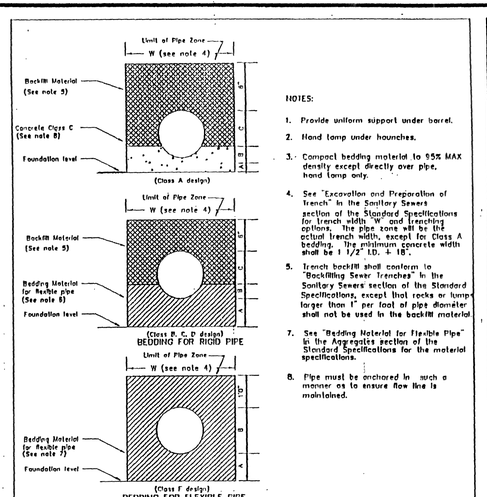
NOTES: 1) UNIT IS DESIGNED TO PICK UP SURFACE DRAINAGE A SHORT DISTANCE FROM CATCH BASIN.

2) CAST IN PLACE OR MASONRY CONSTRUCTION UNITS MAY BE SUBSTITUTED AS PER APWA STANDARDS OR STATE STANDARDS.

3) FOR DETAILS OF REINFORCEMENT OR INSTALLATION SEE APWA STANDARDS OR STATE STANDARDS.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	INLET DETAIL	ST-7



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.

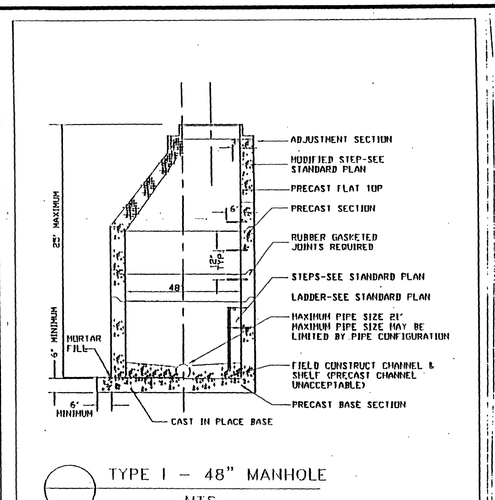
BEDDING CLASS DESIGN

DIMENSION	CLASS A	CLASS B	CLASS C	CLASS D	CLASS F
A	4" MIN. 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.	3/8 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

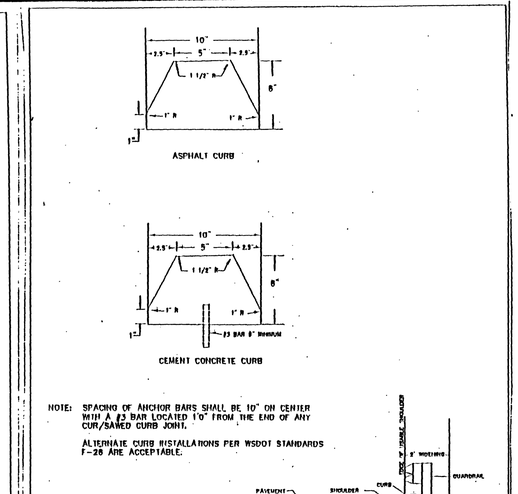


TYPE I - 48" MANHOLE

NTS

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	TYPE I 48" MANHOLE	SS-2



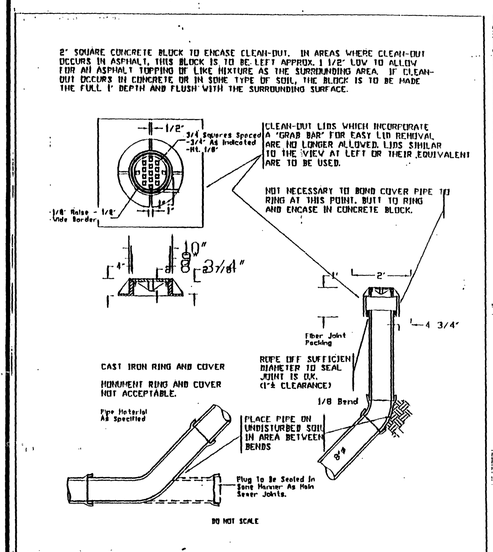
NOTE: SPACING OF ANCHOR BARS SHALL BE 10" ON CENTER WITH A #3 BAR LOCATED 10" FROM THE END OF ANY CUR/SAWED CURB JOINT.

ALTERNATE CURB INSTALLATIONS PER WSDOT STANDARDS F-28 ARE ACCEPTABLE.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	EXTRUDED CURB	R-10

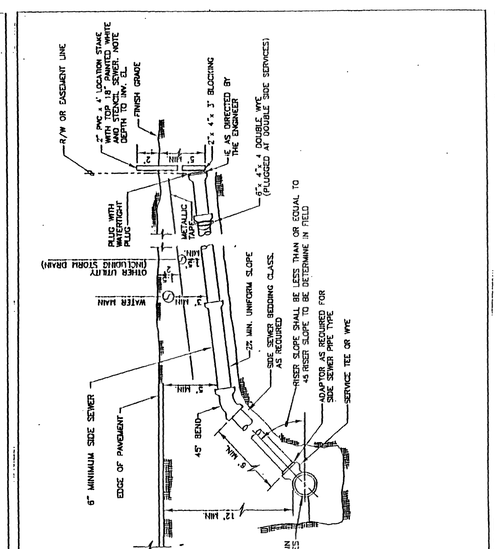
JUNE 1995 2091S14A/R-13



SSCU 04/30/92 16:17

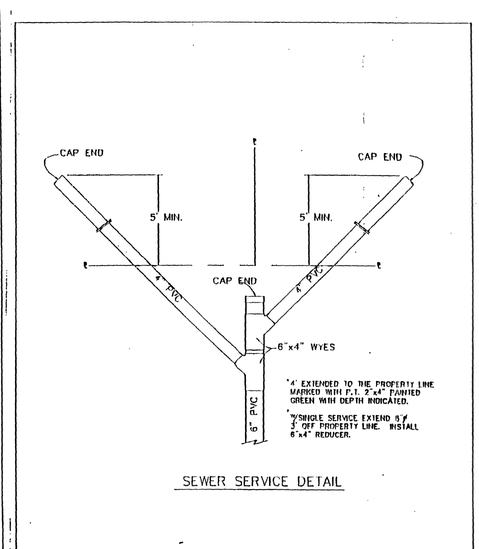
NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	8" CLEAN OUT	SS-5



NOT TO SCALE

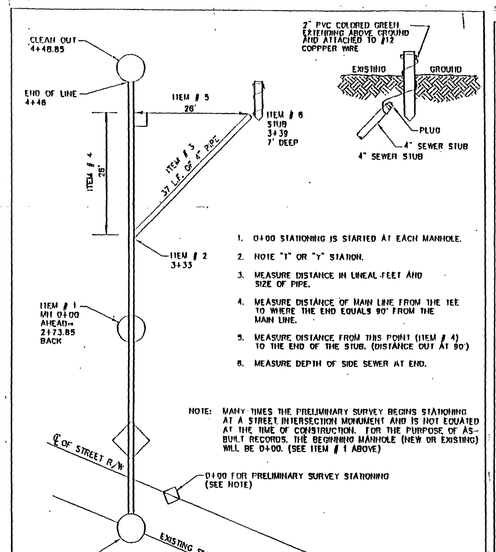
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	SANITARY SEWER SIDE SERVICE INSTALLATION DEEP MAINS	SS-8



SEWER SERVICE DETAIL

NOT TO SCALE

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

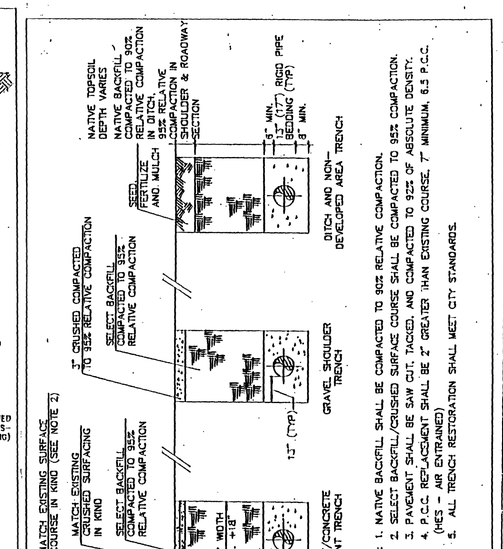


1. 0+00 STATIONING IS STARTED AT EACH MANHOLE.
2. NOTE "I" OR "Y" STATION.
3. MEASURE DISTANCE IN LINEAL FEET AND SIZE OF PIPE.
4. MEASURE DISTANCE OF MAIN LINE FROM THE TEE TO WHERE THE END EQUALS 90' FROM THE MAIN LINE.
5. MEASURE DISTANCE FROM THIS POINT (ITEM # 4) TO THE END OF THE STUB. (DISTANCE OUT AT 90')
6. MEASURE DEPTH OF SIDE SEWER AT END.

NOTE: MANY TIMES THE PRELIMINARY SURVEY BEGINS STATIONING AT A STREET INTERSECTION MONUMENT AND IS NOT EQUATED AT THE TIME OF CONSTRUCTION. FOR THE PURPOSE OF AS-BUILT RECORDS, THE BEGINNING MANHOLE (NEW OR EXISTING) WILL BE 0+00. (SEE ITEM # 1 ABOVE)

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	SANITARY SEWER TYPICAL SIDE SERVICE	SS-14



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	SS-15

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR - A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

RONALD T. JEPSON PE 6/10/05

AS BUILT

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND AVE BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	NA
DRAWN BY	P.T.J.
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2005

REVISION

RONALD T. JEPSON STATE OF WASHINGTON 10861 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 1/25/2006

SEWER DETAILS

CLIENT: WHATCOM SELF HELP HOMES

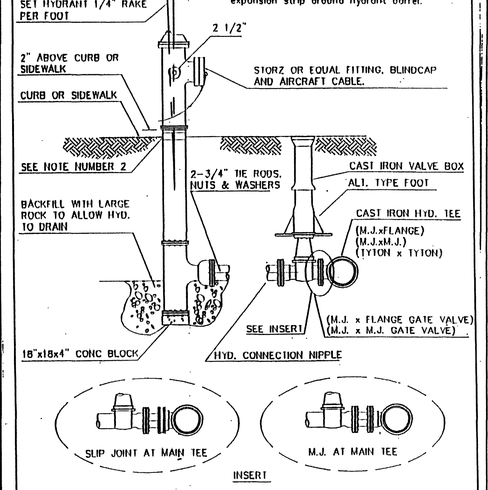
D2

C:\Land Projects 3\2000\00130\dwg\00130-Fendac-Plans 07/30/2002 12:25:00 PM PDT

NOTES

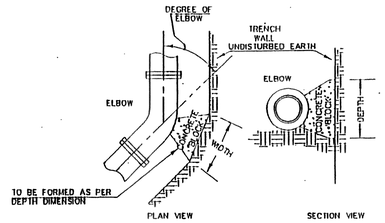
(1.) For close coupled hydrants use all flange type connections.

(2.) If hydrant rises through concrete use expansion strip around hydrant barrel.



NOT TO SCALE

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



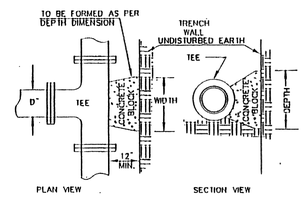
100 P.S.I. OPERATING PRESSURE

SIZE	11 1/4°		22 1/2°		45°		90°	
	W	U	W	U	W	U	W	U
6"	1-0"	1-0"	1-0"	1-0"	1-6"	1-6"	2-3"	1-6"
8"	1-3"	1-3"	1-3"	1-3"	1-9"	1-9"	3-0"	2-0"
10"	1-9"	1-6"	1-9"	1-6"	2-3"	2-3"	3-6"	2-6"
12"	2-0"	1-9"	2-0"	1-9"	2-9"	2-6"	4-0"	3-0"
16"	2-9"	2-3"	2-9"	2-3"	4-0"	3-0"	5-3"	3-6"
20"	3-6"	2-9"	3-6"	2-9"	4-6"	4-0"	6-6"	4-0"
24	4-6"	3-0"	4-6"	3-0"	5-6"	5-0"	9-9"	5-0"

NOTE:
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIBLE CONDITIONS. SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	THRUST BLOCKING ELBOWS	W-2



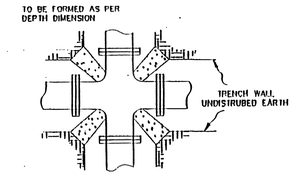
100 P.S.I. OPERATING PRESSURE

SIZE	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"

NOTE:
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIBLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	THRUST BLOCKING TEES	W-3



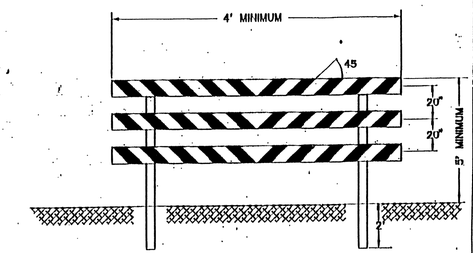
100 P.S.I. OPERATING PRESSURE

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"	2'-6"
24"	3'-0"	2'-0"

NOTE:
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIBLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	THRUST BLOCKING 4-WAY INTERSECTION	W-4



NOTES:

WIDTH OF RAIL = 8" TO 12"

LENGTH OF RAIL = 4' MIN. TO 8' MAX.

WIDTH OF STRIPES = 6"

HEIGHT = 5' MIN.

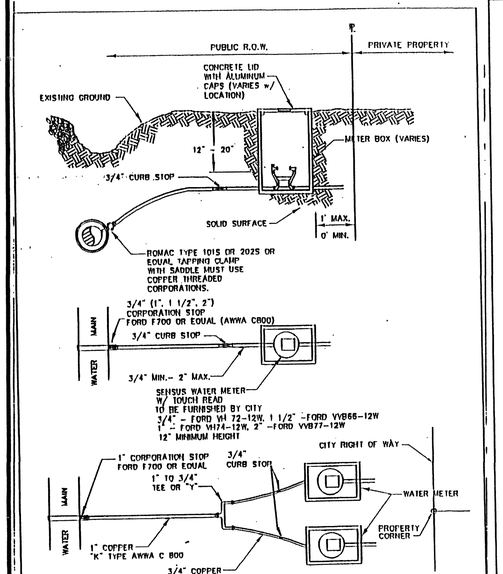
TYPE OF FRAME = 4"X 4" POST BURIED 2' DEEP

COLOR = RED ON WHITE, FULLY REFLECTORIZED

TYPE 111 BARRICADE

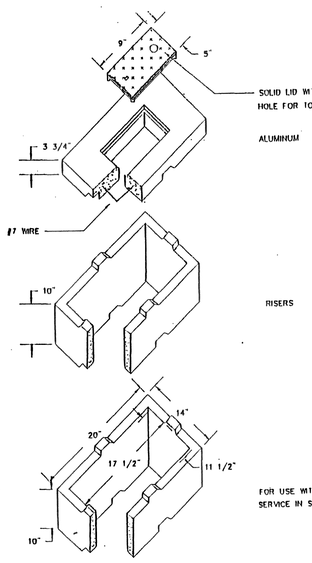
I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES AND CONSTRUCTED IN CONFORMANCE WITH THE PLANS APPROVED BY THE PUBLIC WORKS DIRECTOR FOR SAID DEVELOPMENT AND THE GENERAL SPECIFICATIONS ADOPTED BY THE CITY OF FERNDALE DEPARTMENT OF PUBLIC WORKS.

RONALD T. JEPSON Nov 21. 05



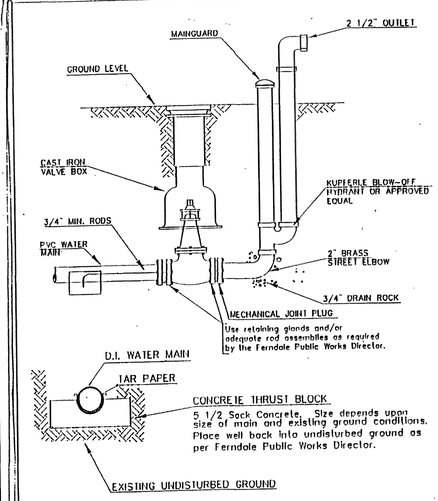
NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	TYPICAL WATER SERVICE (3/4" TO 2")	W-5



NOT TO SCALE

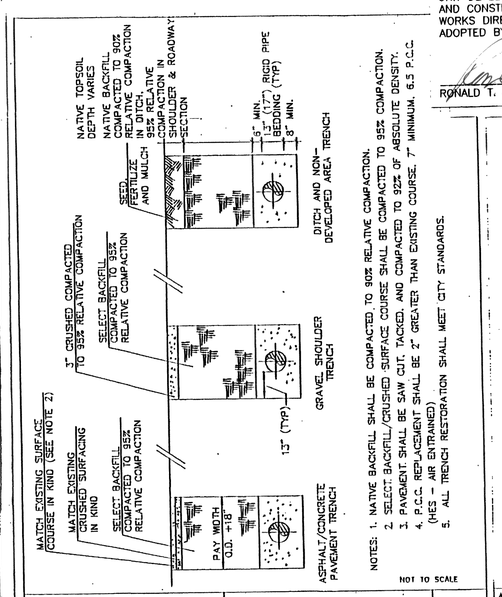
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	NO. 1 METER BOX FOG TITE	W-6



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

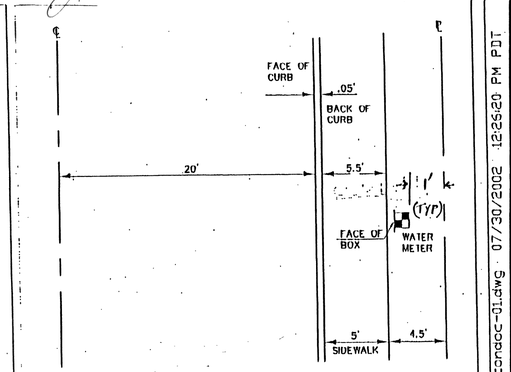
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	2" BLOW-OFF NON-EXTENDABLE MAIN	W-10



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. (NES 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



NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	WATER METER LOCATION DETAIL	W-14

RONALD T. JEPSON & ASSOC.

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS

222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	NA
DRAWN BY	P.T.J.
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/04/2005

REVISION

STATE OF WASHINGTON RONALD T. JEPSON 18 22681 REGISTERED PROFESSIONAL ENGINEER

1/25/2006

AS BUILT

Ronald T. Jepson PE 6/10/05

BY:

WATER DETAILS

CLIENT: WHATCOM SELF HELP HOMES

00130

D3

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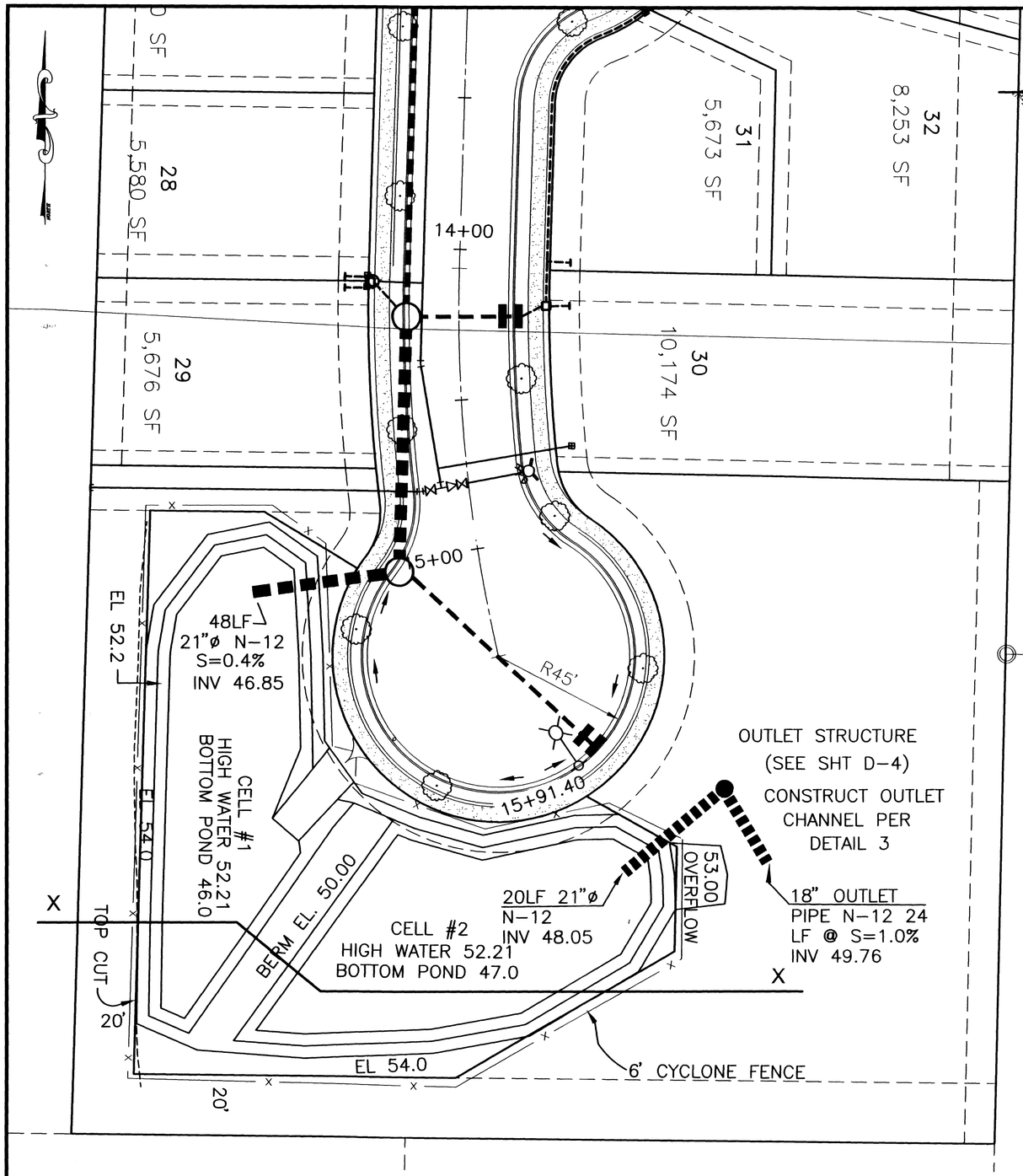
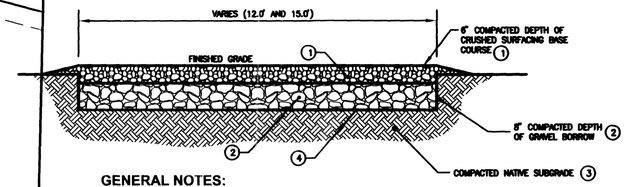


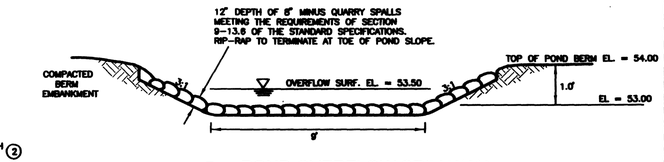


GENERAL NOTES:

1. CRUSHED SURFACING BASE COURSE SHALL CONFORM TO SECTION 9-03.9(3) OF THE 2002 STANDARD SPECIFICATIONS, COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557 TESTING.
2. GRAVEL BORROW SHALL CONFORM TO SECTION 9-03.14 OF THE 2002 STANDARD SPECIFICATIONS. GRAVEL BORROW SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR).
3. THE EXCAVATED SUBGRADE SHALL BE FREE OF TOPSOIL, ORGANICS, AND OTHER DELETERIOUS MATERIAL. COMPACT SUBGRADE TO A MINIMUM OF 90% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR).
4. GEOTEXTILE FABRIC SHALL BE OF WOVEN CONSTRUCTION WITH A MINIMUM GRAB TENSILE STRENGTH OF 200 LBS CONFORMING TO ASTM D4632 AND PLACED ON PREPARED SUBGRADE WITH 18" MINIMUM OVERLAPPING SEAMS.

1 ACCESS ROAD SECTION

SCALE: NOT TO SCALE



2 POND OVERFLOW SPILLWAY

SCALE: NOT TO SCALE

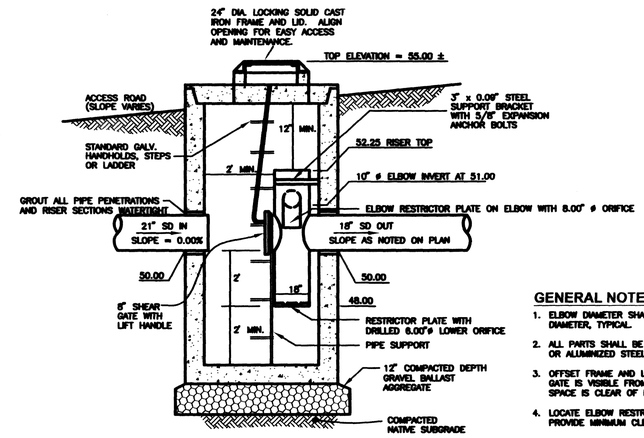
DETENTION POND
BOTTOM OF STORAGE = 50.00
TOP OF STORAGE = 52.21
STORED VOL. AT 52.21 = 33,370 CF
POND EMERGENCY OVERFLOW = 53.00
TOP OF POND = 54.00
POND SIDESLOPES = 3:1

WETPOND CELL #1
BOTTOM OF SED. STORAGE = 45.50
TOP OF SED. STORAGE = 46.00
TOP OF DEAD STORAGE = 50.00
ACTIVE STORAGE (46 – 50) = 11,858 CF
TOP OF POND = 54.00

WETPOND CELL #2
BOTTOM OF SED. STORAGE = 46.50
TOP OF SED. STORAGE = 47.00
TOP OF DEAD STORAGE = 50.00
ACTIVE STORAGE (47 – 50) = 19,878 CF

WETPOND TOTAL STORAGE = 31,735 CF
WETPOND SIDESLOPE = 2:1
% OF WETPOND VOL. IN CELL #1 = 37.4%

ACCESS ROAD
5:1 (20%) INTO CELL #1
12' WIDE INTO CELL #1
15' WIDE AROUND CUL-DE-SAC

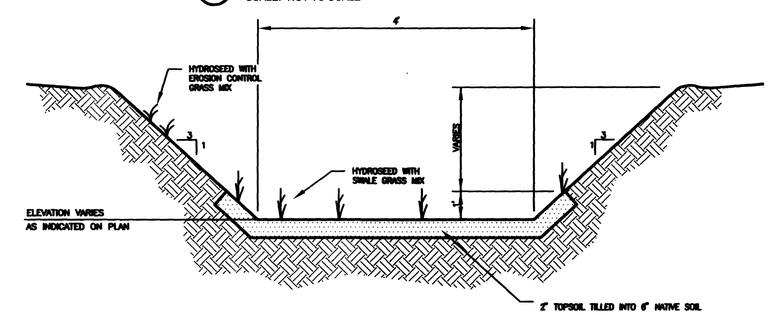


GENERAL NOTES:

1. ELBOW DIAMETER SHALL BE LARGER THAN ORIFICE DIAMETER, TYPICAL.
2. ALL PARTS SHALL BE STAINLESS STEEL, ALUMINUM, OR ALUMINIZED STEEL.
3. OFFSET FRAME AND LADDER OR STEPS SO CLEANOUT GATE IS VISIBLE FROM TOP AND SO CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
4. LOCATE ELBOW RESTRICTOR(S) AS NECESSARY TO PROVIDE MINIMUM CLEARANCE AS SHOWN.

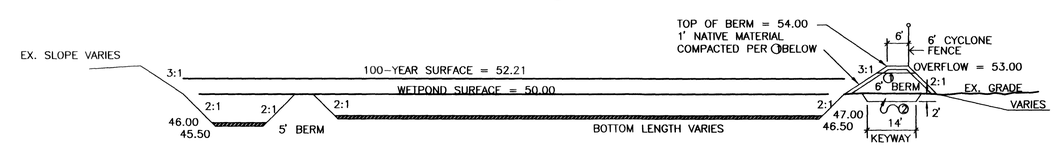
4 TYPE II, 60" DIA. CONTROL STRUCTURE

SCALE: NOT TO SCALE



3 OUTLET CHANNEL SECTION

SCALE: NOT TO SCALE



6" SEDIMENT STORAGE IN BOTTOM OF EACH CELL

POND SECTION X–X

NOT TO SCALE

1. BERM EMBANKMENT(AND KEYWAY WHERE NECESSARY)
   MATERIAL SHALL CONTAIN:
   MIN. 30% CLAY
   MAX. 60% SAND
   MAX. 60% SILT
   NOMINAL GRAVEL AND/OR COBBLE CONTENT
   MATERIALS SHALL BE PLACED IN 6" LOOSE LIFTS AND COMPACTED TO A MIN. OF 95% OF MAX. DRY DENSITY PER ASTM D-1557(MODIFIED PROCEDURE). EXISTING BASE SOIL BELOW BERM OR KEYWAY AREAS SHALL BE COMPACTED TO A MIN. OF 95% OF MAX. DRY DENSITY PER ASTM D-1557(MODIFIED PROCEDURE).
2. KEYWAY SHALL BE INSTALLED UNDER ALL BERM AREAS EXTENDING MORE THAN FOUR FEET ABOVE EXISTING GROUND. KEYWAY SHALL BE CENTERED ALONG BOTTOM WIDTH OF BERM.

I HEREBY CERTIFY THAT THE IMPROVEMENTS IN PORTAL MANOR – A PLANNED UNIT DEVELOPMENT HAVE BEEN INSPECTED BY RONALD T. JEPSON & ASSOCIATES 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.

Ronald T. Jepson P.E. 6/10/05
RONALD T. JEPSON

RONALD T. JEPSON STATE OF WASHINGTON 9361 REGISTERED PROFESSIONAL ENGINEER
6/10/05
1/25/2006

APPROVED
MAY 0 2 2006
BY
CITY OF FERNDALE

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

STANDARD POND, BIO-SWALE SEED MIX

40%	DWARF TALL FESCUE
30%	BARCLAY PRENNIAL RYEGRASS
25%	CREEPING RED FECUE
5%	HIGHLAND COLONIAL BENTGRASS
COVERAGE:	2.5 TO 5LBS. PER 1000 SQ. FT.

AS BUILT

00130

PORTAL MANOR
DETENTION POND & WATER QUALITY FACILITY

CLIENT:
WHATCOM SELF HELP HOMES

D4

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225 PH.(360)733-5760 FAX (360)647-8939

SCALE	AS SHOWN
DRAWN BY	KDR
CHECKED BY	T.A.U.
APPROVED BY	R.T.J.
DATE	10/4/2006

REVISION

00323.010 S9.DG KR

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