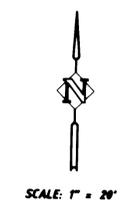


SITE GRADING AND DRAINAGE PLAN
HIDDEN SPRINGS RIDGE CONDOMINIUMS
 WEST LINN, OREGON

Harper Righellis, Inc.
 ENGINEERS

5000 SW WOODMAN AVENUE, SUITE 300, PORTLAND, OR 97201
 (503) 221-1131 FAX (503) 221-1171

LEGEND	
---	EXISTING CONTOURS
○	MANHOLE
□	INLET
- - -	PROPOSED CONTOUR
---	PROPOSED STORM LINE
—○—	SEDIMENT CONTROL FENCE
□	INLET BARRIER

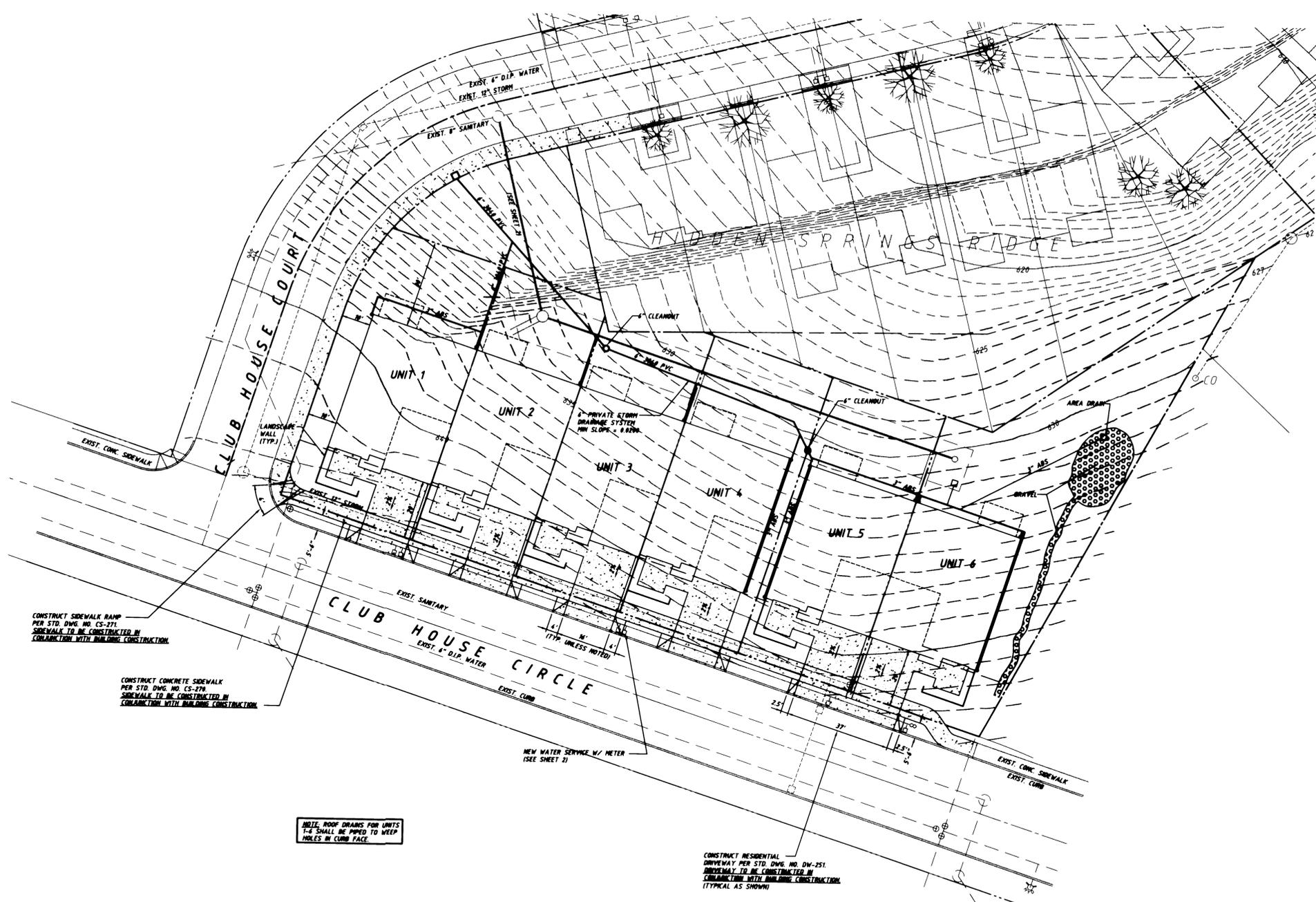


OWNER/DEVELOPER
 LA HOUSE DEVELOPMENT, L.L.C.
 3013 CLUB HOUSE COURT
 WEST LINN, OREGON 97148
 PHONE: (503) 654-1400

ARCHITECT
 POLLARD HOSMAR DESIGNERS, INC.
 770 S.W. 5TH LOOP, STE. 270
 TIGARD, OREGON 97223
 PHONE: (503) 624-9251

SURVEYOR
 JENNIFER SUMMERS, P.L.S., INC.
 549 S.W. WALNUT STREET
 HILLSBORO, OREGON 97123
 PHONE: (503) 648-8979

ENGINEER
 HARPER RIGHELLIS, INC.
 5200 S.W. MACADAM AVENUE, STE. 300
 PORTLAND, OREGON 97201
 PHONE: (503) 221-1131



GENERAL NOTES

GENERAL

WORK SHALL CONFORM WITH CITY OF WEST LINN STANDARDS, WEST LINN WATER DISTRICT STANDARDS, THE UNIFORM BUILDING CODE (UBC), AND THE UNIFORM PLUMBING CODE (UPC).

EXISTING TOPOGRAPHIC INFORMATION AND UTILITIES SHOWN BASED ON TOPOGRAPHIC SURVEY PREPARED BY JENNIFER H. SUMMERS, INC., 549 S.W. WALNUT ST., HILLSBORO, OR 97123.

FIELD VERIFY ALL CURB & STREET GRADES, STORM & SANITARY SEWER INVERTS AT MATCH POINTS AND CONNECTIONS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING.

ACCESS TO EXISTING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES, INCLUDING NORMAL DELIVERY SERVICE AND MAIL SERVICE AND IF NOT, SHALL BE CAUSE FOR WORK STOPPAGE UNTIL EFFECTIVE ACCESS IS ESTABLISHED.

TRAFFIC CONTROL DEVICES, FLAGPERSONS, ETC. SHALL BE IN PLACE PRIOR TO INITIATION OF CONSTRUCTION WORK AND SHALL BE EFFECTIVELY MAINTAINED.

THE CITY OF WEST LINN RESERVES THE RIGHT TO ADD TO OR MODIFY TRAFFIC CONTROL REQUIREMENTS AS MAY BE NECESSARY TO EFFECTIVELY CONTROL TRAFFIC AND TO ASSURE PUBLIC SAFETY.

EXCAVATIONS MUST COMPLY WITH O.R.S. 257.541 THROUGH 257.571. EXCAVATORS SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS 72 HOURS (MIN) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CONNECTED AT THE CONTRACTOR'S EXPENSE.

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. ADJUST ALL RIMS, COVERS AND FRAMES TO FINISH GRADE.

GRADING

ALL STRUCTURAL FILLS SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1556.

ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM SITE. NO FILLING OR EXCAVATING ALLOWED ON LOTS, OR OPEN SPACES, WITHOUT PRIOR APPROVAL OF OWNER.

EROSION CONTROL

TEMPORARY EROSION CONTROL:

THE CONSTRUCTION NOTES AND DETAILS SHOWN ON THIS PLAN REFLECT RECOMMENDED PROCEDURES AS PER WASHINGTON COUNTY EROSION CONTROL PLANS TECHNICAL GUIDANCE BOOK, JANUARY 1991, OR ITS SUCCESSOR.

IT IS THE INTENT OF THESE PLANS TO SHOW POSSIBLE APPLICATIONS OF RECOMMENDED PROCEDURES IN THE EVENT THAT EROSION CONTROL IS NEEDED. ALL RECOMMENDED PROCEDURES ARE DEPENDENT ON CONSTRUCTION METHODS, STAGING, SITE CONDITIONS, WEATHER, AND SCHEDULING. THE PROCEDURES SHOWN ON THE PLANS ARE NOT INTENDED TO BE INCLUSIVE OF ALL THE PROTECTION REQUIRED IN AN AREA AT A PARTICULAR INSTANT. THEY SHOULD BE USED AS A GUIDELINE ONLY.

ALTERNATIVE METHODS OF EROSION CONTROL MAY BE USED IF THEY ARE APPROVED BY THE ENGINEER AND MEET THE S.C.S. UNIVERSAL SOIL LOSS EQUATION CRITERIA.

THE CONTRACTOR IS RESPONSIBLE FOR CONTROL OF SEDIMENT TRANSPORT WITHIN PROJECT LIMITS DURING CONSTRUCTION. IF AN INSTALLED EROSION CONTROL SYSTEM DOES NOT ADEQUATELY CONTAIN SEDIMENT ON SITE, THEN THE EROSION CONTROL MEASURES MUST BE FIELD ADJUSTED BY THE CONTRACTOR AS NECESSARY.

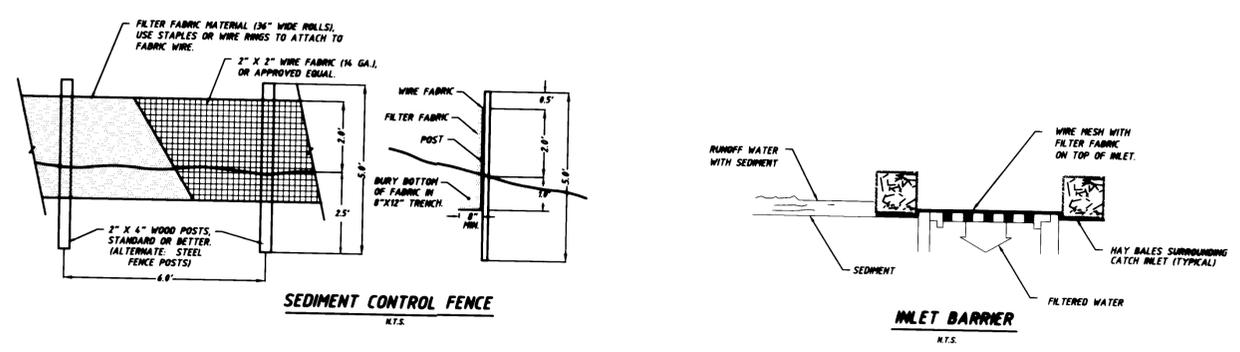
PERMANENT EROSION CONTROL:

TEMPORARY EROSION CONTROL METHODS MUST REMAIN AND BE MAINTAINED UNTIL PERMANENT EROSION CONTROL METHODS ARE IN PLACE AND OPERATIONAL.

VEGETATION ON ALL EMBANKMENTS AND DISTURBED AREAS SHOULD BE RE-ESTABLISHED AS SOON AS CONSTRUCTION IS COMPLETED.

ADDITIONAL INTERIM MEASURES WILL INCLUDE, AT A MINIMUM, INSTALLATION OF HAY BALE SEDIMENT BARRIERS OR SILT FENCES AS PER DETAIL SHOWN ON THE SHEET. THESE MEASURES WILL BE INSTALLED ALONG ALL EXPOSED EMBANKMENT AND CUT SLOPES TO PREVENT SEDIMENT TRANSPORT.

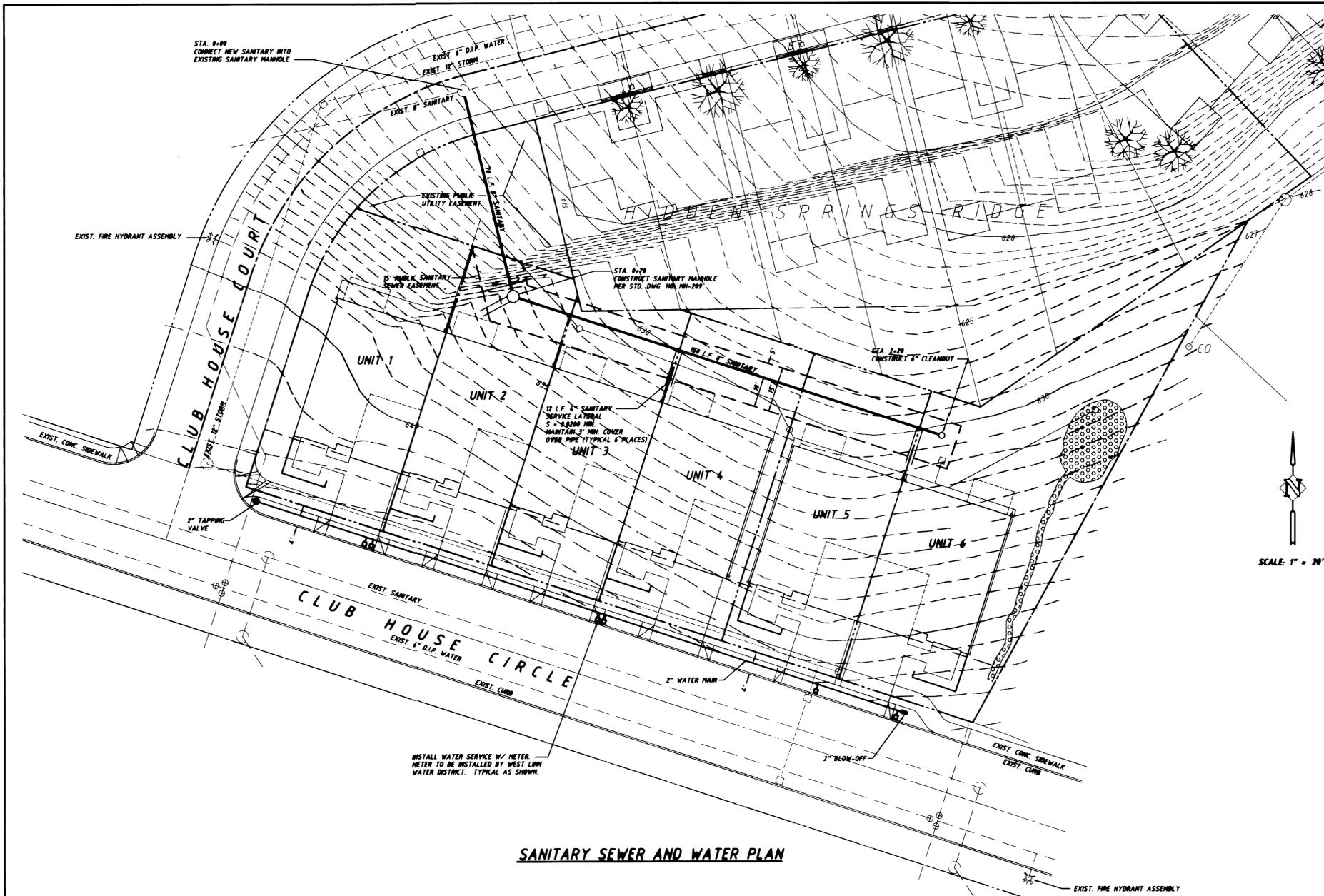
GRADING AND DRAINAGE PLAN



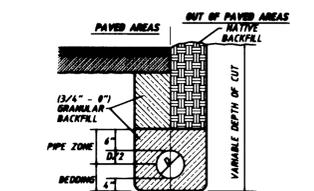
Hidden Springs
 Condominiums
 '98

AS-BUILT
FEBRUARY, 1998

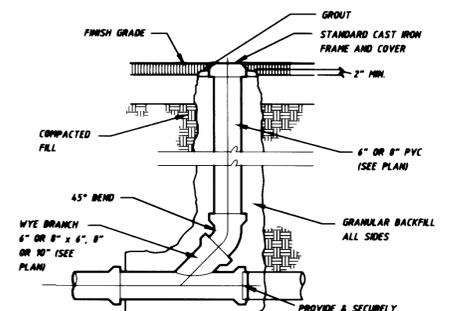
SHEET NO.	DESIGNED: JSE/CLH		DATE	2-24-98
	DRAWN: MAV			
	CHECKED: CLH			
1	REVISED PROPERTY LINES AND LIMIT IN CEMENT AS PER ARCHITECT.			
2	REVISED STORM WATER QUALITY IMPROVEMENTS AS-BUILTS			
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77				
78				
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				



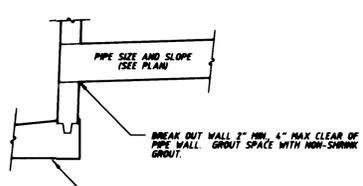
SANITARY SEWER AND WATER PLAN



PIPE BEDDING AND BACKFILL DETAIL
N.T.S.

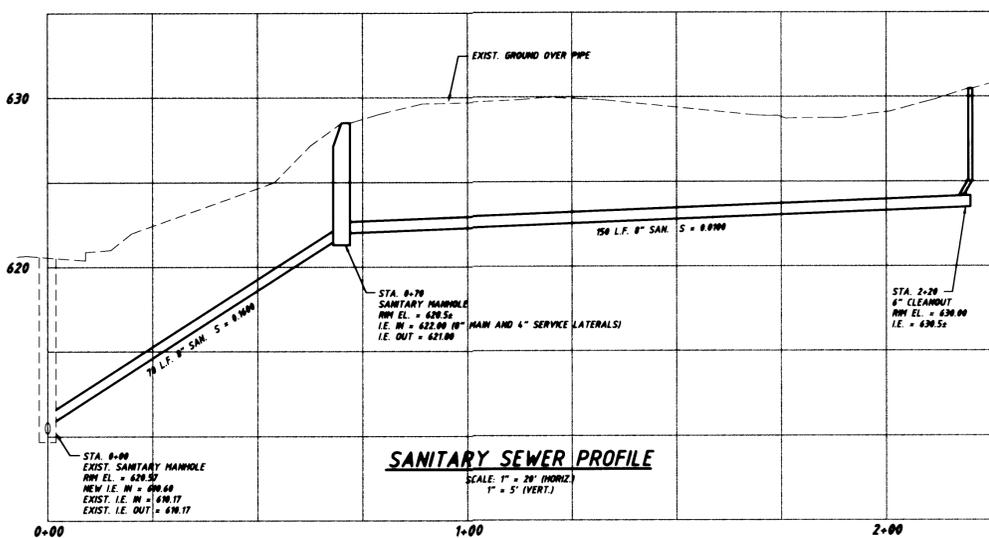


STANDARD CLEANOUT
N.T.S.



PIPE CONNECTION TO EXIST. MANHOLE
N.T.S.

SCALE: 1" = 20'



SANITARY SEWER PROFILE
SCALE: 1" = 20' (HORIZ)
1" = 5' (VERT)

SANITARY SEWER LATERAL TABLE

UNIT NO.	SIZE	SLOPE (MIN %)	PIPE LENGTH	SANITARY STA. MAIN	INV. MAIN	INV. P/L (MIN)
1	4"	2.00	12'	0+70.00	622.00	622.24
2	4"	2.00	12'	0+70.00	622.00	622.24
3	4"	2.00	12'	1+27.00	625.04	625.28
4	4"	2.00	12'	1+29.00	625.15	625.39
5	4"	2.00	12'	2+11.00	629.52	629.76
6	4"	2.00	12'	2+13.00	629.63	629.87

GENERAL NOTES

- GENERAL**
WORK SHALL CONFORM WITH CITY OF WEST LINN STANDARDS, WEST LINN WATER DISTRICT STANDARDS, THE UNIFORM BUILDING CODE (UBC), AND THE UNIFORM PLUMBING CODE (UPC).
- SANITARY SEWER**
SANITARY SEWER PIPE SHALL BE PVC ASTM D 3034, SDR 35.
SANITARY SEWER LATERALS SHALL BE 4" GREEN PVC WITH A MINIMUM SLOPE OF 0.0200.
MARK LATERAL WITH A 2" x 4" PAINTED GREEN WITH "SANITARY AND DEPTH PAINTED ON IT.
- WATER**
ALL WATER LINE WORK SHALL BE IN ACCORDANCE WITH AWWA STANDARDS.
ALL WATER LINE WORK WILL BE INSPECTED AND APPROVED BY CITY OF WEST LINN.
ALL WATER SERVICES SHALL BE CLEANED, FLUSHED AND STERILIZED PER WEST LINN STERILIZATION (CHLORINATION) PROCEDURES.
CONTRACTOR WILL INSTALL ALL DOMESTIC COPPER SERVICES AND WATER METERS. DOUBLE SERVICES SHALL BE 1" DIAMETER TYPE "C" COPPER TUBING. METER SERVICES PER WEST LINN STD. DWG. W-304.
- MISC. UTILITIES**
ELECTRICAL, TELEPHONE, GAS, AND TV INSTALLATION SHALL BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY.
ALL PROPOSED POWER, TELEPHONE, GAS, AND TV SERVICES ON SITE SHALL BE PLACED UNDERGROUND.

AS-BUILT
FEBRUARY, 1998

SANITARY SEWER AND WATER PLAN
HIDDEN SPRINGS RIDGE CONDOMINIUMS
 WEST LINN, OREGON

Harper Righellis, Inc.
 ENGINEERS
 5020 SW MADISON AVENUE, SUITE 500, PORTLAND, OR 97201
 (503) 241-1131 FAX (503) 241-1171



DESIGNED: JSE/CLH	DATE: 2-24-98
DRAWN: MAV	
CHECKED: CLH	

REVISED PROPERTY LINES AND UNIT PLACEMENT AS PER ARCHITECT.	NO.	DATE	DESCRIPTION
1	8-8-98		
2	10-15-98		
3	2-24-98		

R E V I S I O N S

SHEET NO. **C2 of 2** JOB NO. **IND-01**