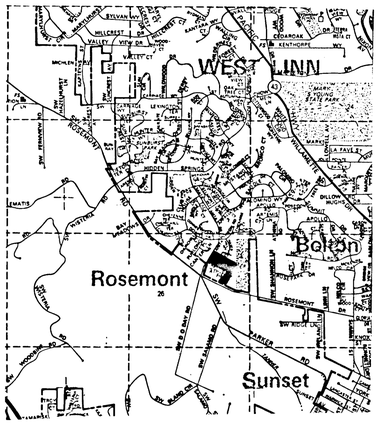

VICINITY MAP

SITE IMPROVEMENTS FOR HAVERHILL ESTATES

TAX LOTS 1301 & 1302, SECTION 26A, 2 1E, W.M., CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

ED FREEMAN (OWNER/DEVELOPER)
1215 ROSEMONT ROAD
WEST LINN, OREGON 97068
TELE: (503) 684-3175

BENCH MARK ELEVATION: 667.22'
(CITY OF WEST LINN DATUM) 2" IRON PIPE WITH BRASS PLUG IN WATER METER BOX, 93.5 FEET EAST ON ROSEMONT ROAD FROM INTERSECTION OF ROSEMONT, PARKER & SANTA ANITA. 17 FEET SOUTH OF SOUTH EDGE PAVEMENT ROSEMONT ROAD.

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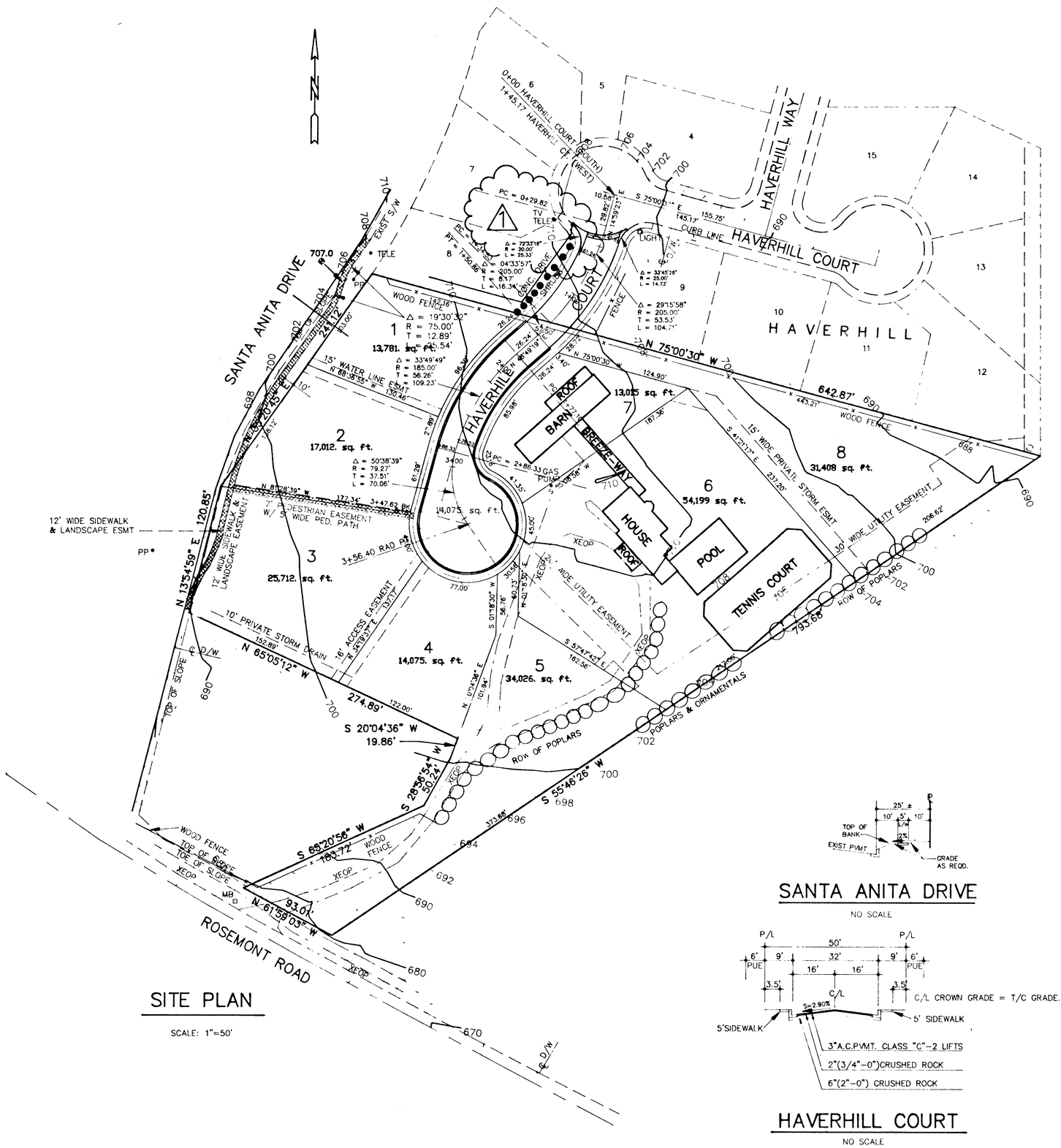
OFFICE 503-452-8003 ▲ FAX 503-452-8043
PLAZA WEST ▲ SUITE 230 ▲ 9600 SW OAK ▲ PORTLAND,OR 97223

SHEET INDEX

1. TITLE SHEET
2. SITE PLAN & STREET DETAILS
3. MASTER UTILITIES PLAN
   GRADING & EROSION CONTROL PLAN
4. STREET & STORM DRAIN PLAN/PROFILE
5. SANITARY SEWER & WATER PLAN/PROFILE
6. CONSTRUCTION & EROSION CONTROL DETAILS
7. STANDARD CONSTRUCTION DETAILS

PROJECT NO. 223-002
HAVERHILL ESTATES
SUB 91 - 0017

-Haverhill Estates 91-



SITE PLAN

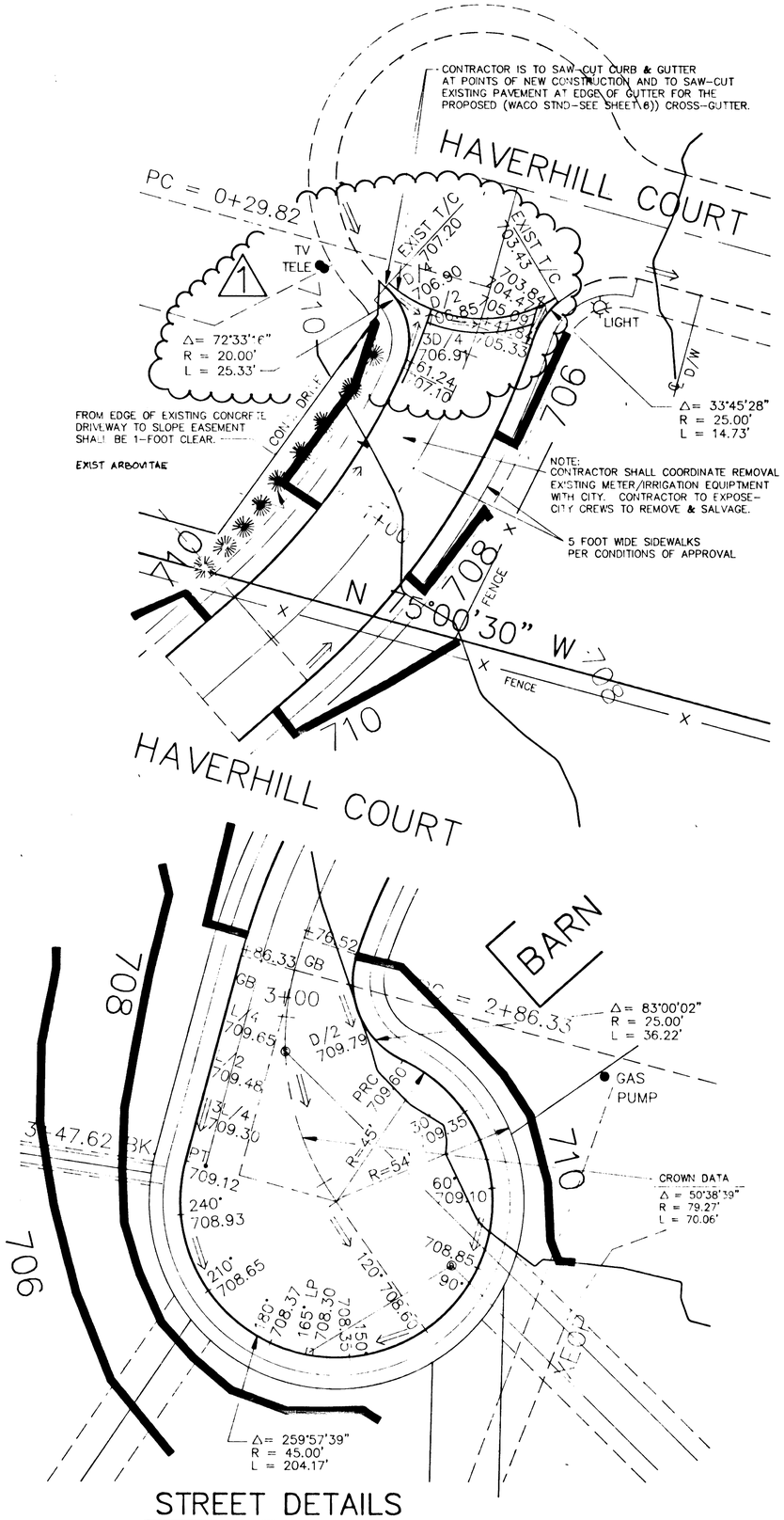
SCALE: 1"=50'

SANTA ANITA DRIVE

NO SCALE

HAVERHILL COURT

NO SCALE



STREET DETAILS

SCALE: 1" = 20'

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PLAZA WEST • SUITE 200 • 6005 SW OAK • PORTLAND,OR 97223

NO.	DATE	REVISION	BY
1	9-4-92	REV T/C STA & GRADES	SCO
2	5-6-93	REV S/W SANTA ANITA DR.	SCO

DESIGNED BY DRF DATE JUN 92
DRAWN BY DRF DATE JUN 92
REVIEWED BY JMP DATE JUN 92
PROJECT NO. WEST LINN 223-002
SCALE SHOWN

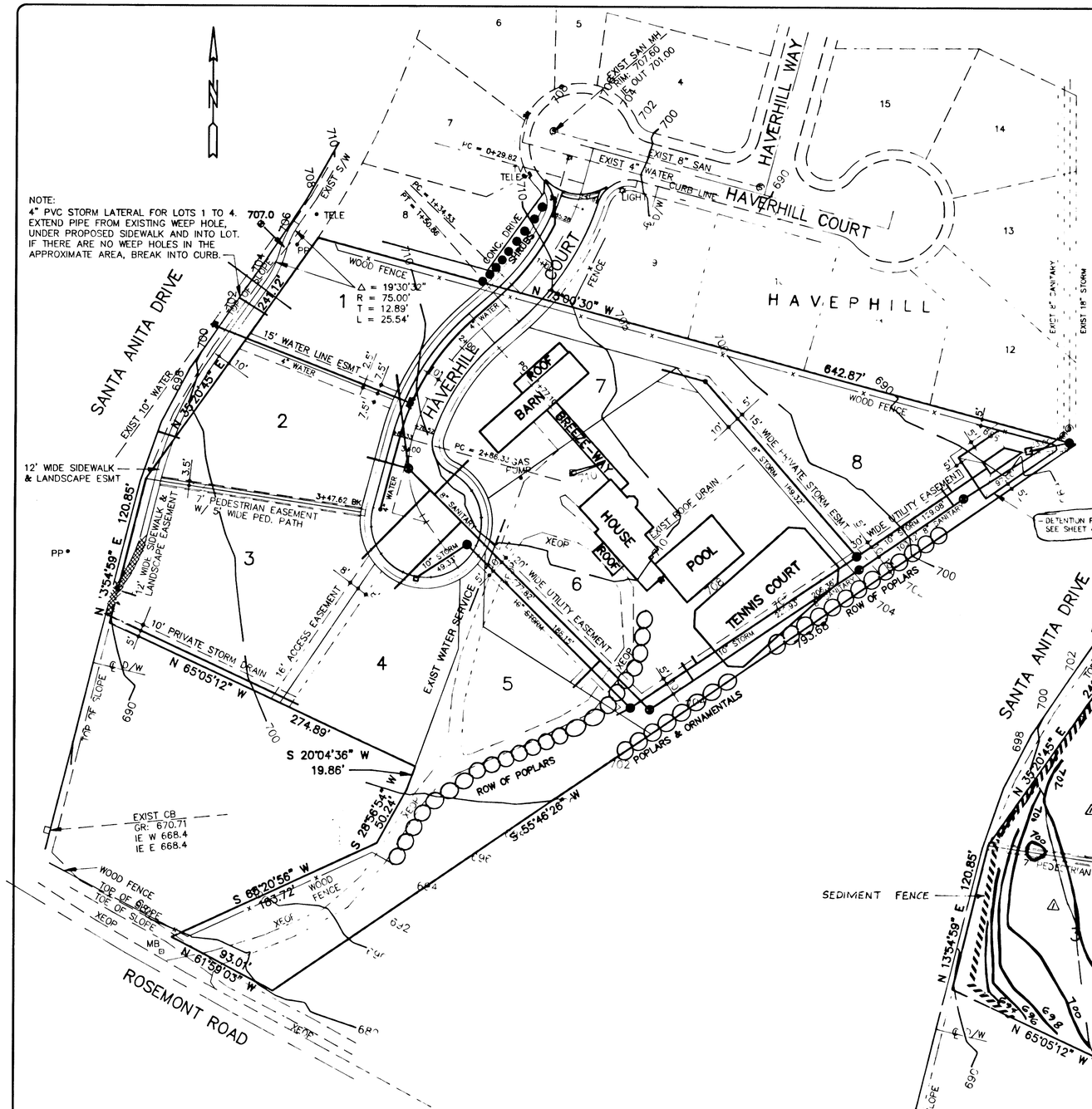
REGISTERED PROFESSIONAL ENGINEER 43,280 OREGON JULY 17, 1992 MICHAEL J. WIN

HAVERHILL ESTATES

SITE PLAN & STREET DETAILS AND CONSTRUCTION NOTES/DETAILS

SHEET 2 OF 7

PROJECT	WEST LINN
NO.	223-002
TYPE	CONSTRUCTION



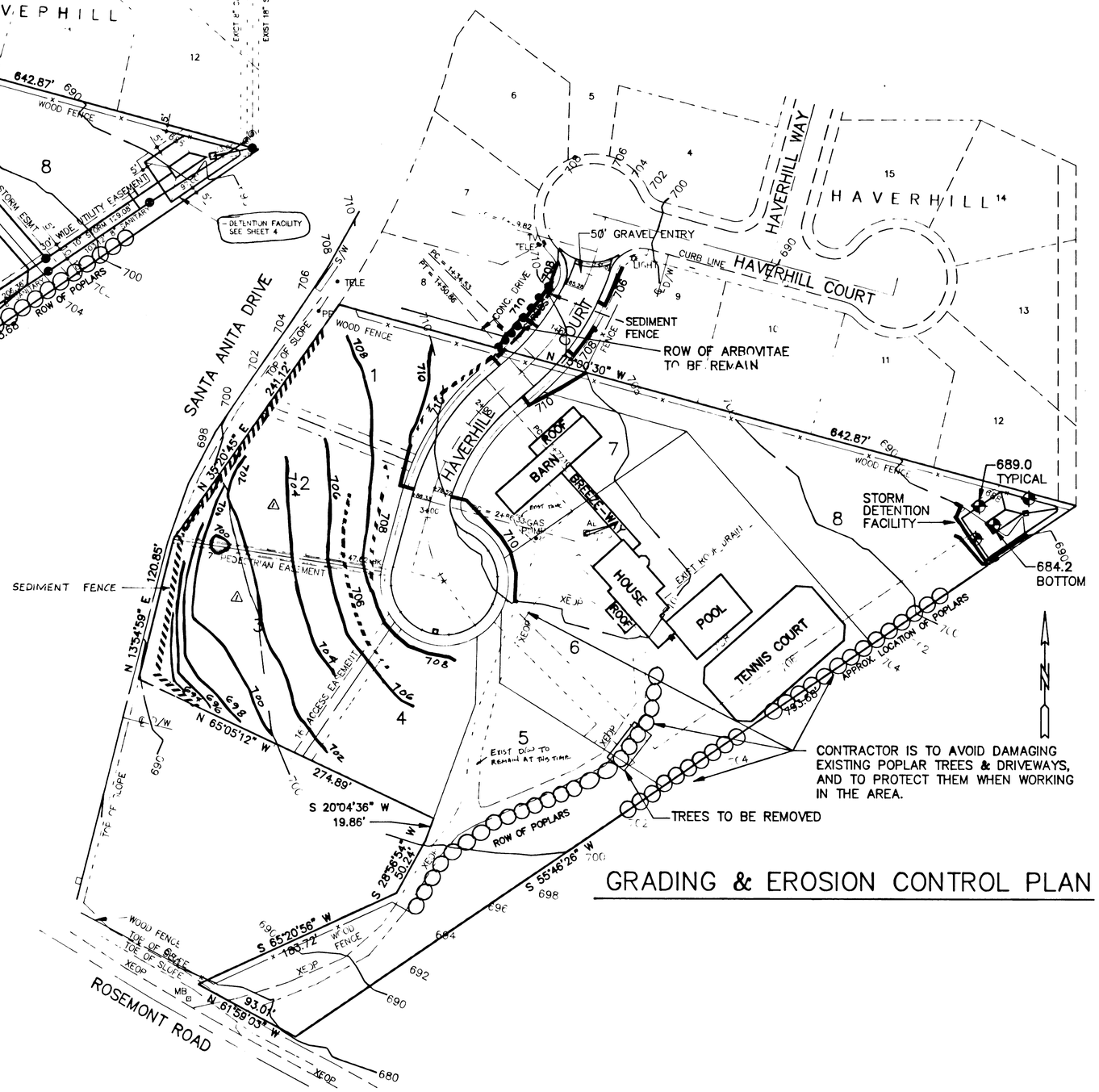
MASTER UTILITY PLAN

REMOVAL ITEMS & NOTES

EXISTING WOODEN FENCES ARE TO BE REMOVED BY THE OWNER OR HIS AGENTS. SEE NOTE ON PLAN REGARDING THE PROTECTION OF EXISTING DRIVEWAYS & TREES.

REMOVAL OF EXISTING SERVICE LINES (AERIAL & UNDERGROUND), POLES, MISCELLANEOUS ITEMS NOT SHOWN AND THE CLEANUP OF DEBRIS IN THE CONSTRUCTION AREAS ARE ALL TO BE INCLUDED IN THE REMOVAL BID ITEM.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND COORDINATE THE REMOVAL OF ANY EXISTING UTILITIES OR PROPER FILLING OF THE UTILITIES (SEPTIC TANKS, ETC.) IF THEY ARE TO REMAIN. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE STATE OF OREGON WATER MASTER (503) 681-7018 TO APPROVE THE FILLING OF ANY SEPTIC TANK AND THE REMOVAL OF ANY EXISTING WELL FOUND ON THE SITE.



GRADING & EROSION CONTROL PLAN

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PLAZA WEST • SUITE 230 • 9600 SW OAK • PORTLAND, OR 97223

NO.	DATE	REVISION	BY
1	8/18/92	REVISED GRADING PLAN	MVL
2	10/9/92	REVISED GRADING PLAN	MVL
3	10-25-93	AS-BUILT GRADING LOTS 1-4	ELMS

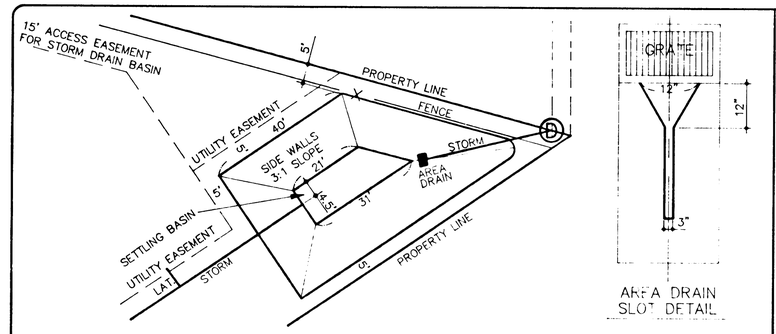
DESIGNED BY DRF DATE JUN 92
DRAWN BY DRF DATE JUN 92
REVIEWED BY MVL DATE JUN 92
PROJECT NO. 223-002
SCALE 1" = 50'

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1986 MICHAEL J. VAN LOO

HAVERHILL ESTATES
MASTER UTILITY PLAN
GRADING & EROSION CONTROL PLAN

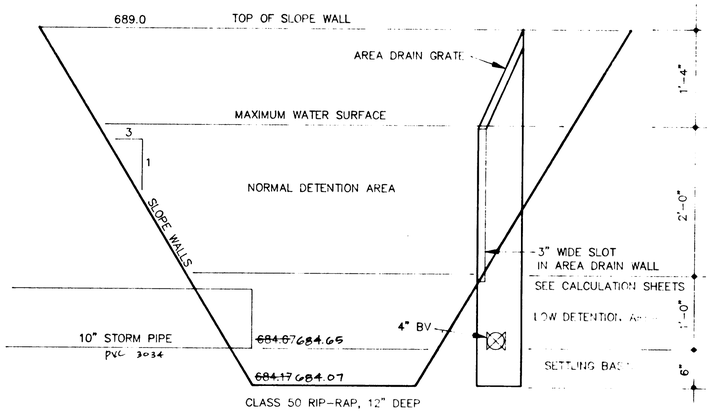
SHEET 3 OF 7

PROJECT HAVERHILL EST.
NO. 223-002
TYPE CONSTRUCTION



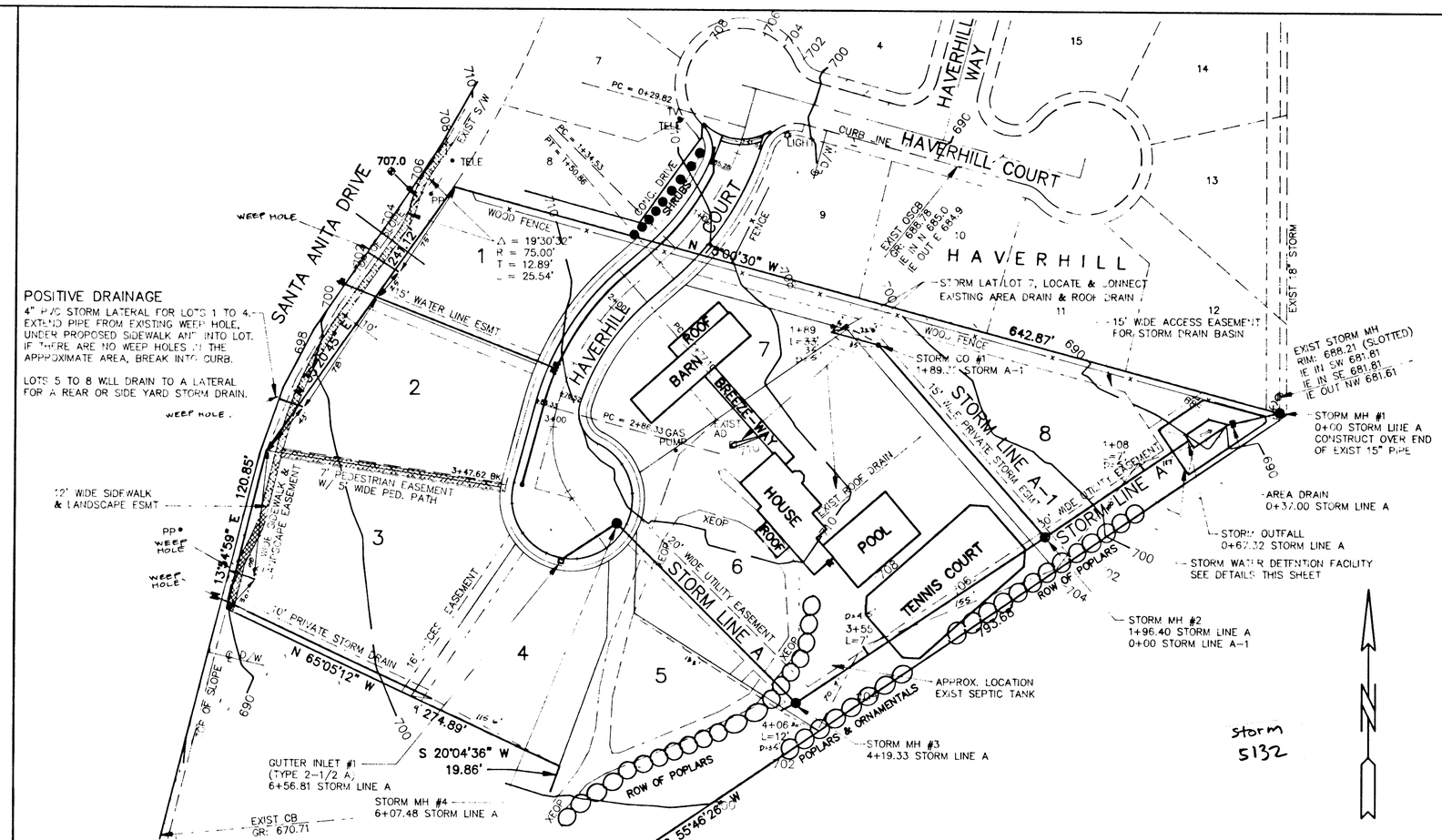
PLAN–DETENTION FACILITY

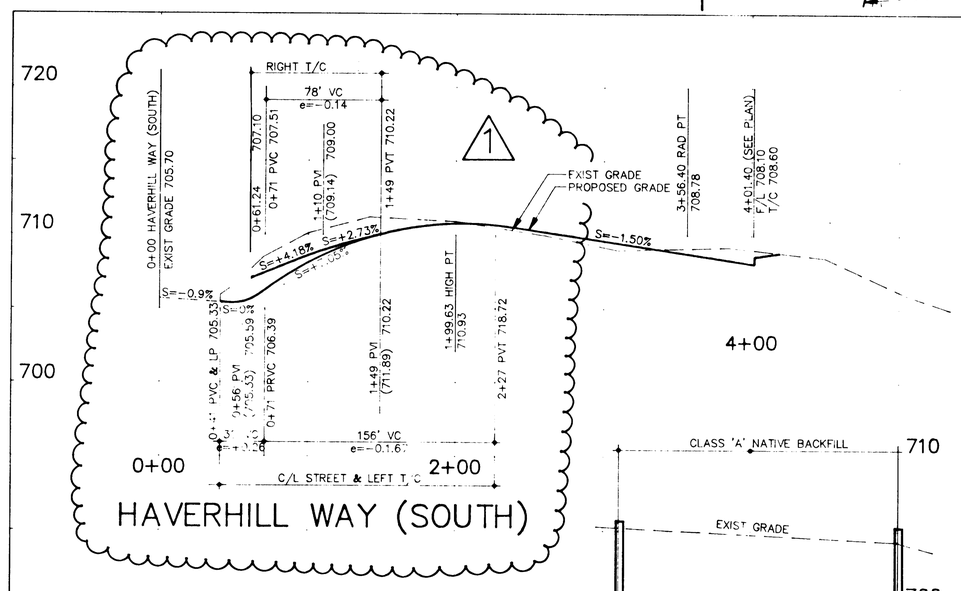
SCALE: 1"=20'

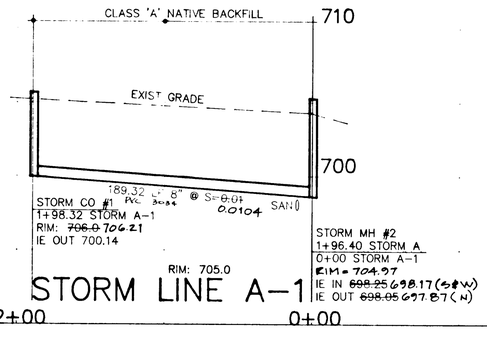


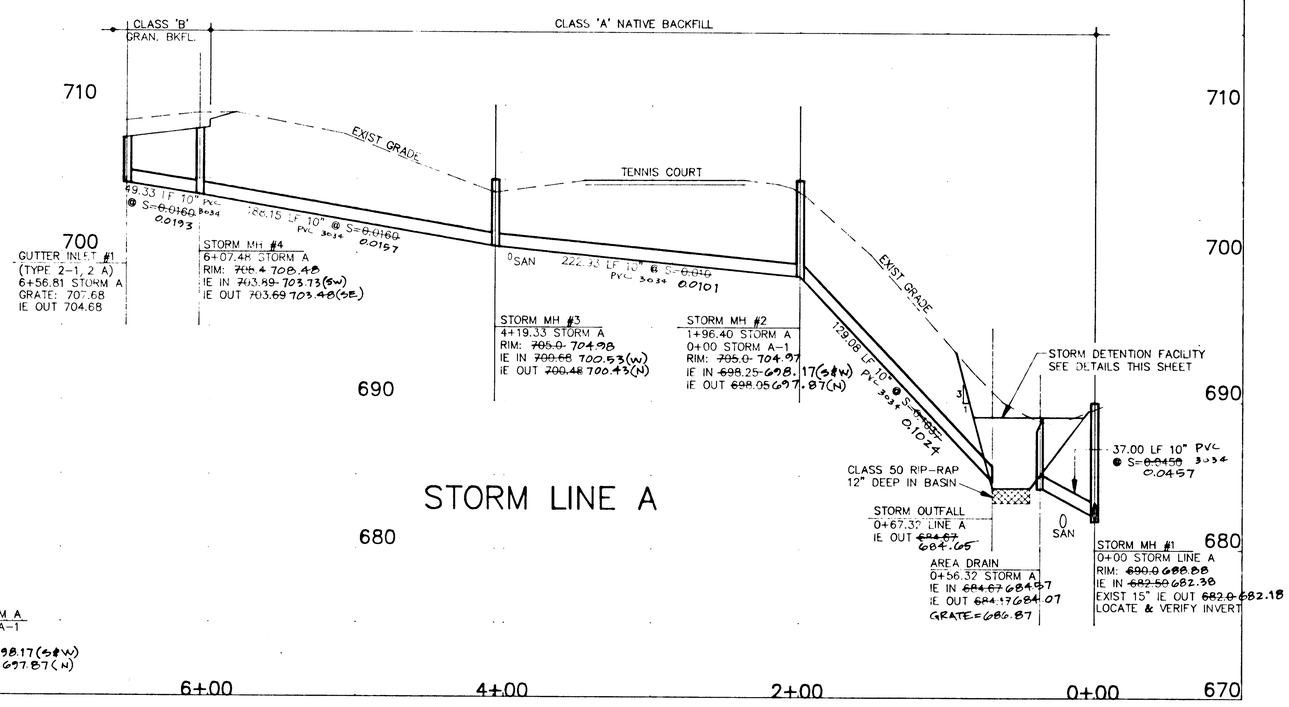
SECTION–DETENTION FACILITY

NO SCALE









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PLAZA WEST • SUITE 230 • 9600 SW OAK • PORTLAND, OR 97223

NO.	DATE	REVISION	BY
1	9-4-92	REV C/L & T/C GRADES	SCO
2	12/1/92	AS-BUILT PER ALTA INFO	RLM
3	5-6-93	AS-BUILT	SCO
4	10-25-95	AS-BUILT PVC & P LOTS 1,2,3	RLM/JE

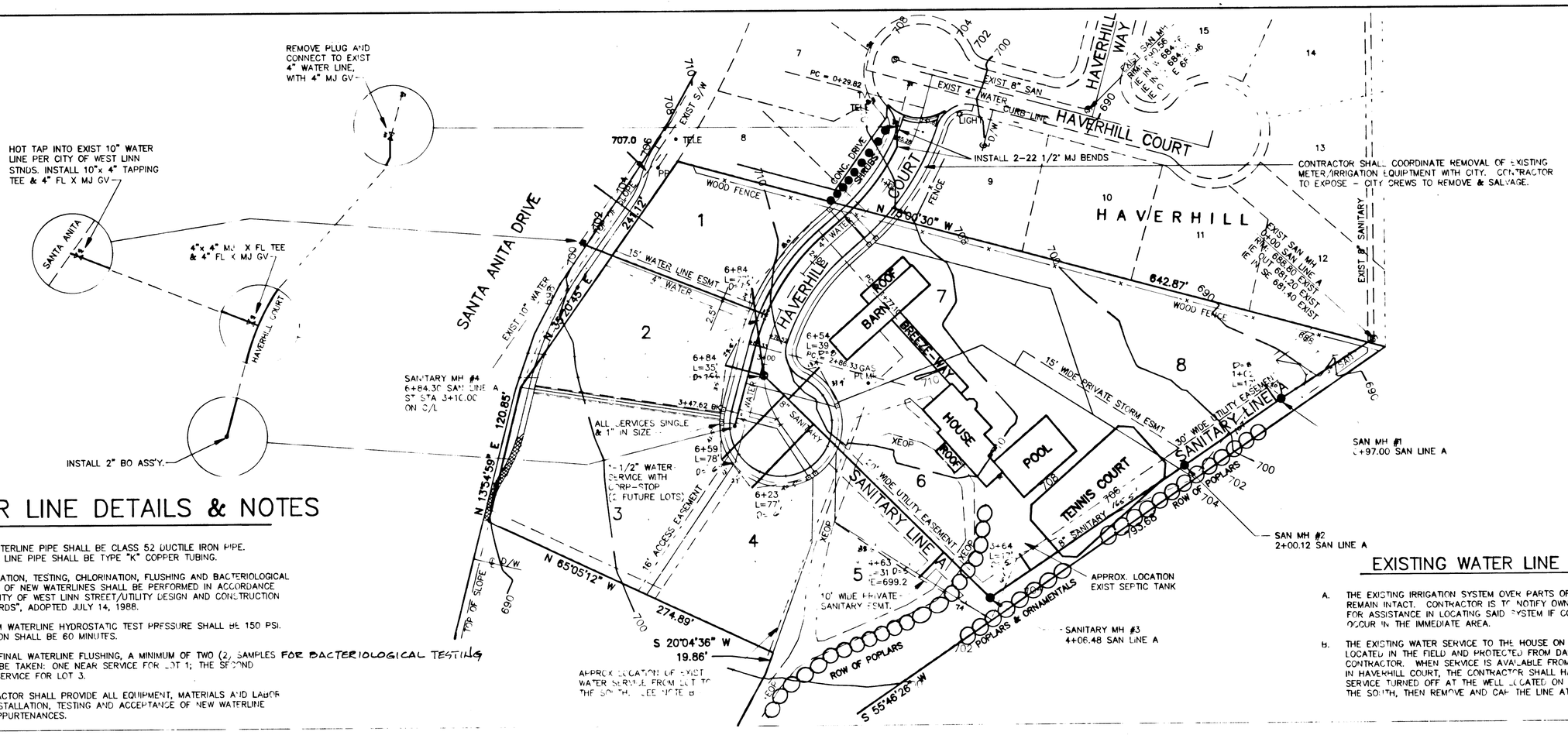
DESIGNED BY DRF DATE MAR 92
DRAWN BY DRF DATE MAR 92
REVIEWED BY MVL DATE MAR 92
PROJECT NO. 223-002
SCALE HORIZ. 1" = 50'
VERT. 1" = 5'

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1992 MICHAEL J. DOLAN

HAVERHILL ESTATES
STREET & STORM PLAN/PROFILE

SHEET 4 OF 7

PROJECT HAVERHILL EST.
NO. 223-002
TYPE CONSTRUCTION



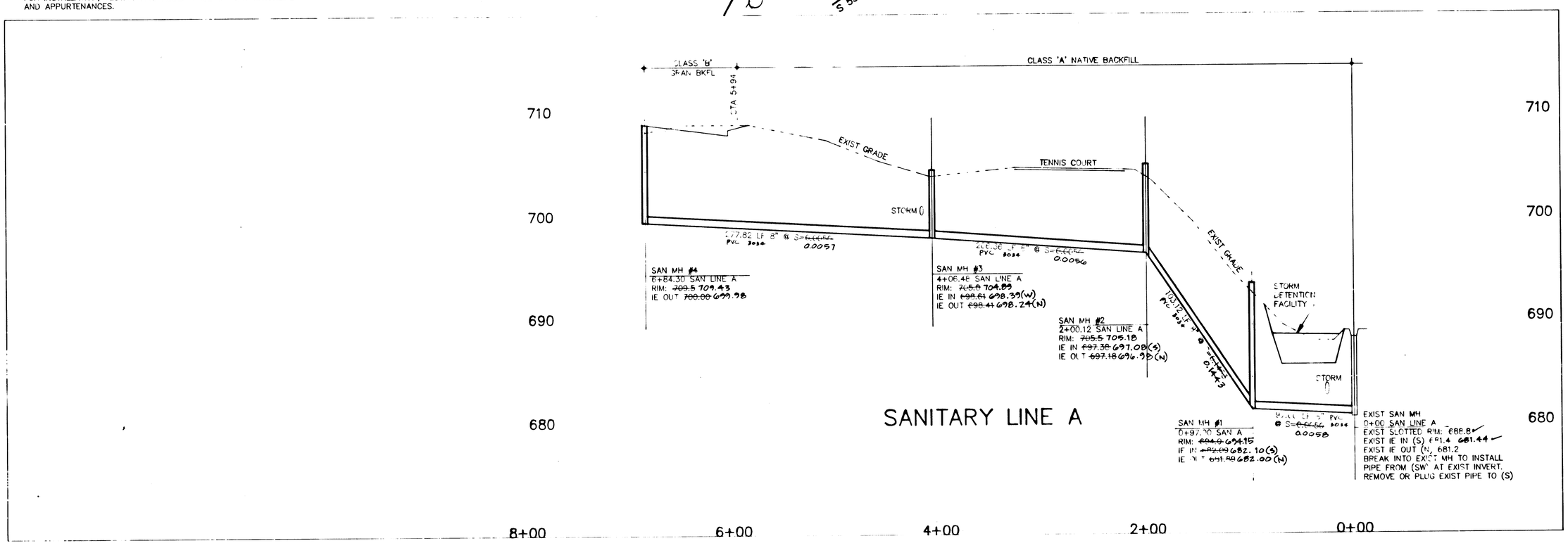
WATER LINE DETAILS & NOTES

1. NEW WATERLINE PIPE SHALL BE CLASS 52 DUCTILE IRON PIPE. SERVICE LINE PIPE SHALL BE TYPE "K" COPPER TUBING.
2. INSTALLATION, TESTING, CHLORINATION, FLUSHING AND BACTERIOLOGICAL TESTING OF NEW WATERLINES SHALL BE PERFORMED IN ACCORDANCE WITH "CITY OF WEST LINN STREET/UTILITY DESIGN AND CONSTRUCTION STANDARDS", ADOPTED JULY 14, 1988.
3. MINIMUM WATERLINE HYDROSTATIC TEST PRESSURE SHALL BE 150 PSI. DURATION SHALL BE 60 MINUTES.
4. AFTER FINAL WATERLINE FLUSHING, A MINIMUM OF TWO (2) SAMPLES FOR BACTERIOLOGICAL TESTING SHALL BE TAKEN: ONE NEAR SERVICE FOR LOT 1; THE SECOND NEAR SERVICE FOR LOT 3.
5. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR FOR INSTALLATION, TESTING AND ACCEPTANCE OF NEW WATERLINE AND APPURTENANCES.

EXISTING WATER LINE NOTES

A. THE EXISTING IRRIGATION SYSTEM OVER PARTS OF LOTS 6 & 7 SHALL REMAIN INTACT. CONTRACTOR IS TO NOTIFY OWNER OF PROPERTY FOR ASSISTANCE IN LOCATING SAID SYSTEM IF CONSTRUCTION SHALL OCCUR IN THE IMMEDIATE AREA.

B. THE EXISTING WATER SERVICE TO THE HOUSE ON LOT 6 SHALL BE LOCATED IN THE FIELD AND PROTECTED FROM DAMAGE BY THE CONTRACTOR. WHEN SERVICE IS AVAILABLE FROM THE WATERLINE IN HAVERHILL COURT, THE CONTRACTOR SHALL HAVE THE EXISTING SERVICE TURNED OFF AT THE WELL LOCATED ON THE PROPERTY TO THE SOUTH, THEN REMOVE AND CAP THE LINE AT THE HOUSE.



SANITARY LINE A

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PLAZA WEST • SUITE 250 • 8000 SW OAK • PORTLAND, OR 97223

NO.	DATE	REVISION	BY
1	12/1/92	AS-BUILT FOR ALPHA INFO	RLM/SO

DESIGNED BY DRF DATE MAR 92
DRAWN BY DRF DATE MAR 92
REVIEWED BY MVL DATE MAR 92
PROJECT NO. 223-002
SCALE HORIZ. 1" = 50'
VERT. 1" = 5'

REGISTERED PROFESSIONAL ENGINEER 13,280 OREGON JULY 17, 1992 MICHAEL V. LOWE

HAVERHILL ESTATES
SANITARY & WATER PLAN/PROFILE

SHEET 5 OF 7

PROJECT HAVERHILL EST.
NO. 223-002
TYPE CONSTRUCTION

EROSION CONTROL NOTES

1) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROL DURING CONSTRUCTION BETWEEN THE PERIODS OF OCTOBER 1, AND MAY 1 OF EACH YEAR PER THE "EROSION CONTROL PLANS TECHNICAL GUIDANCE HANDBOOK" (ESC) DATED JANUARY, 1991.

2) APPROVAL OF THIS 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.)

3) THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED BY VEGETATION/LANDSCAPING IS ESTABLISHED.

4) THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE APPLICANT/CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

5) THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

6) THE ESC FACILITIES SHOWN THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.

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

8) 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.

9) AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED 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.

10) STABILIZED GRAVEL CONSTRUCTION ENTRANCES 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.

11) STORM DRAIN INLETS, BASINS AND AREA DRAINS SHALL BE PROTECTED UNTIL PAVEMENT SURFACES ARE COMPLETED AND/OR VEGETATION IS RE-ESTABLISHED.

12) PAVEMENT SURFACES AND VEGETATION ARE TO BE PLACED AS RAPIDLY AS POSSIBLE.

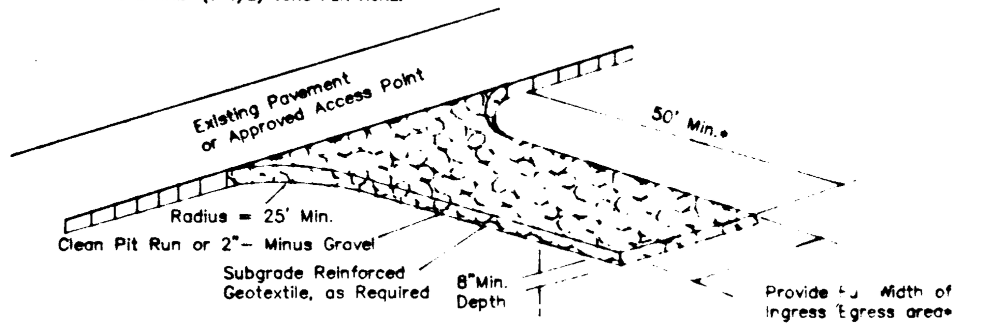
13) SEEDING, MULCHING AND REVEGETATION SHALL BE PERFORMED AS SOON AS GRADING FOR EACH PHASE OF CONSTRUCTION.

14) RECOMMENDED EROSION CONTROL GRASS SEED MIXES ARE AS FOLLOWS: SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED IF APPROVED BY CITY OF WEST LINN.

A. DWARF GRASS MIX (LOW HEIGHT, LOW MAINTENANCE): ELKA DWARF PERENNIAL RYEGRASS, 80% BY WEIGHT; CREEPING RED FESCUE, 20% BY WEIGHT. APPLICATION RATE: 100 POUNDS MINIMUM PER ACRE.

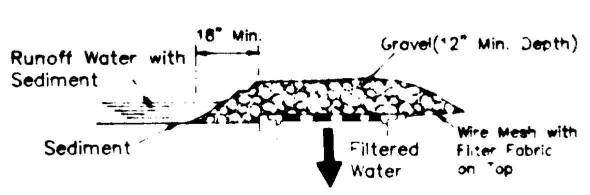
B. STANDARD HEIGHT GRASS MIX ANNUAL RYEGRASS, 40% BY WEIGHT; TURF-TYPE FESCUE, 60% BY WEIGHT; APPLICATION RATE: 100 POUNDS MINIMUM PER ACRE.

15) WOOD CELLULOSE FIBER SHALL BE APPLIED AT THE RATE OF ONE AND ONE HALF (1-1/2) TONS PER ACRE.

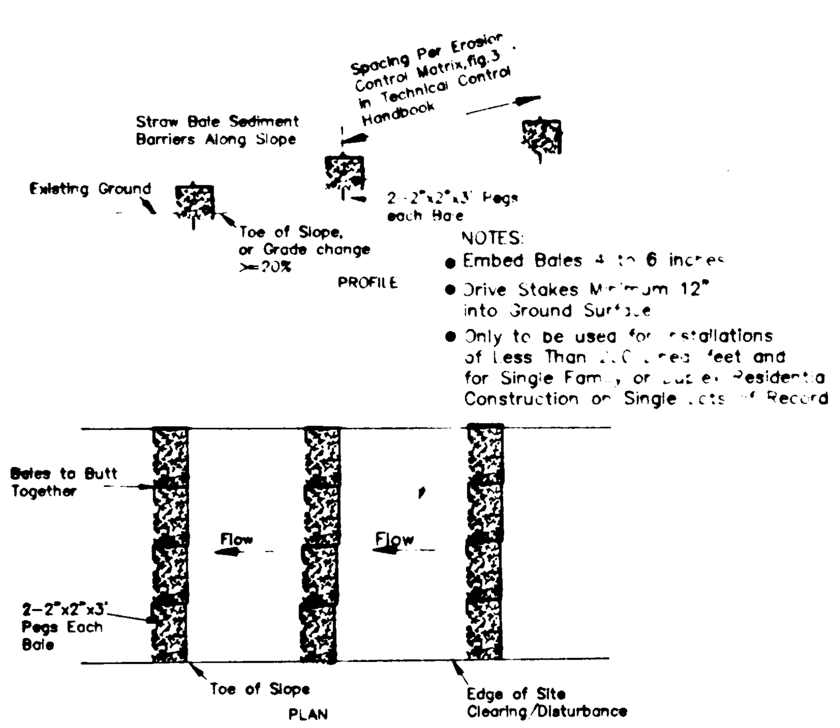


* 20' Min. for Single Family and Duplex Residential

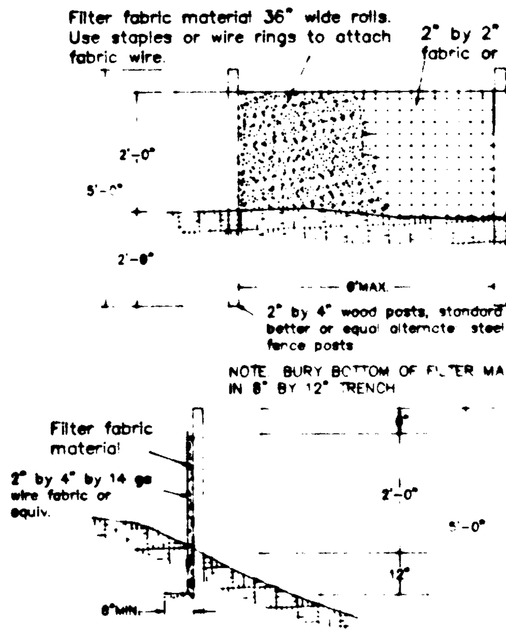
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
FIGURE 3-1A



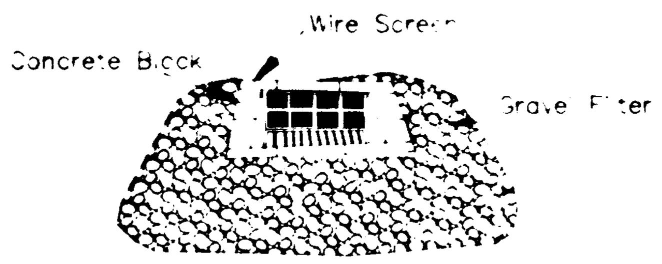
GRAVEL & WIRE MESH INLET BARRIER
FIGURE 3-7C

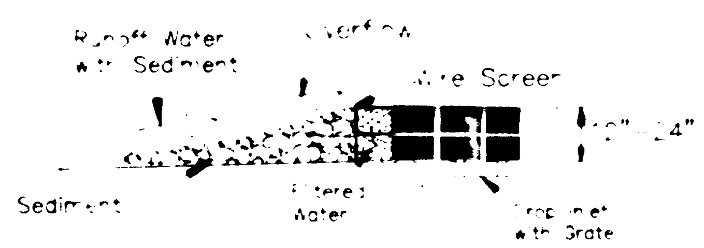


STRAW BALE SEDIMENT BARRIER
FIGURE 3-3A

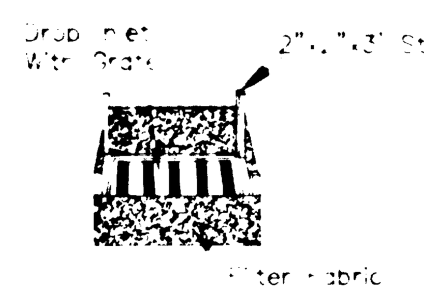


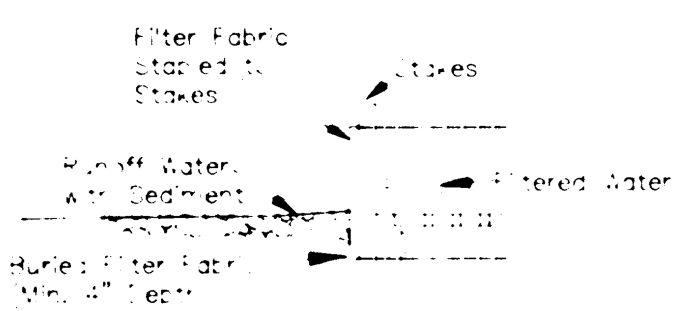
SEDIMENT FENCE DETAILS
FIGURE 3-2



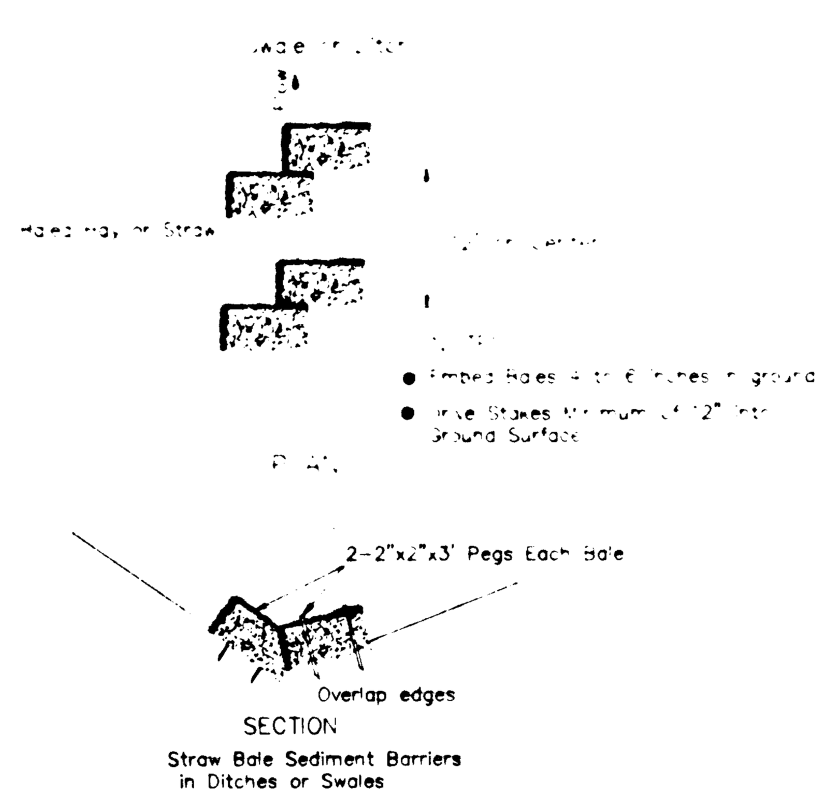


BLOCK & GRAVEL INLET BARRIER
FIGURE 3-7B

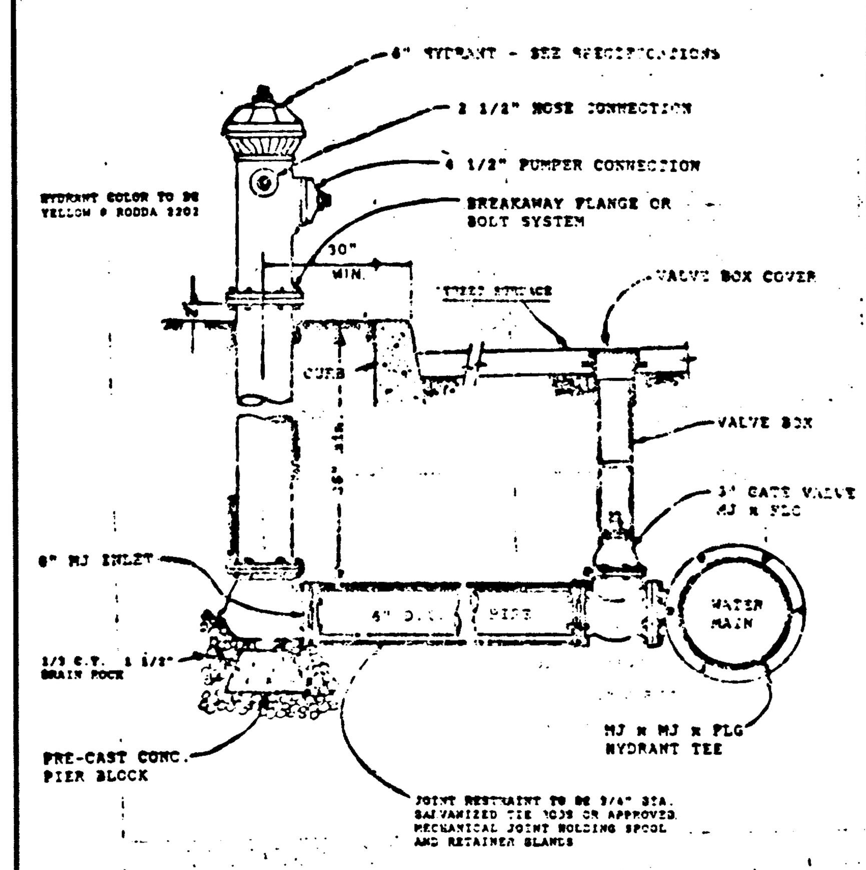




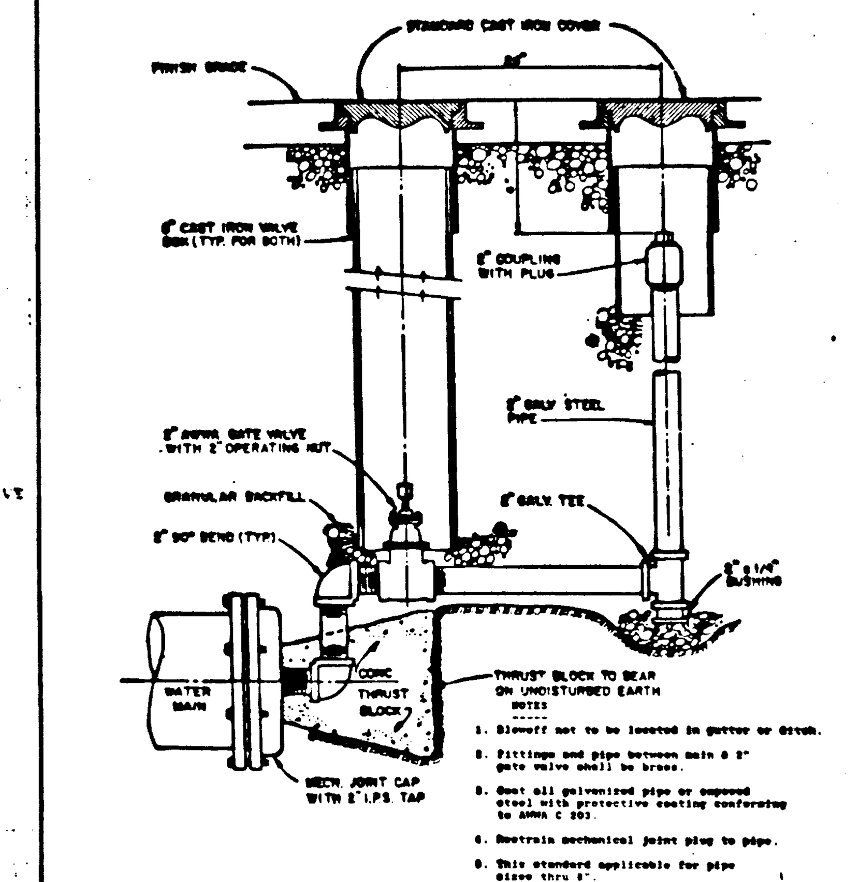
FILTER FABRIC INLET BARRIER
FIGURE 3-7A



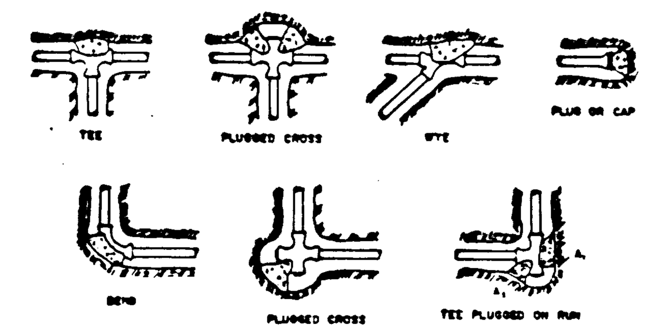
STRAW BALE SEDIMENT BARRIER
FIGURE 3-3B



CITY OF WEST LINN	FIRE HYDRANT	
DRAWN BY DDP DATE 5-26-87		
CHECKED BY DATE 5-27-87	DWG. NO. FH - 300	
APPROVED BY Earl Reed DATE 5-27-87		



CITY OF WEST LINN	BLOWOFF	
DRAWN BY DDP DATE 5-26-87		
CHECKED BY DATE	DWG. NO. BO - 301	
APPROVED BY Earl Reed DATE 5-27-87		



BEARING AREA OF THRUST BLOCK (in sq. ft.)

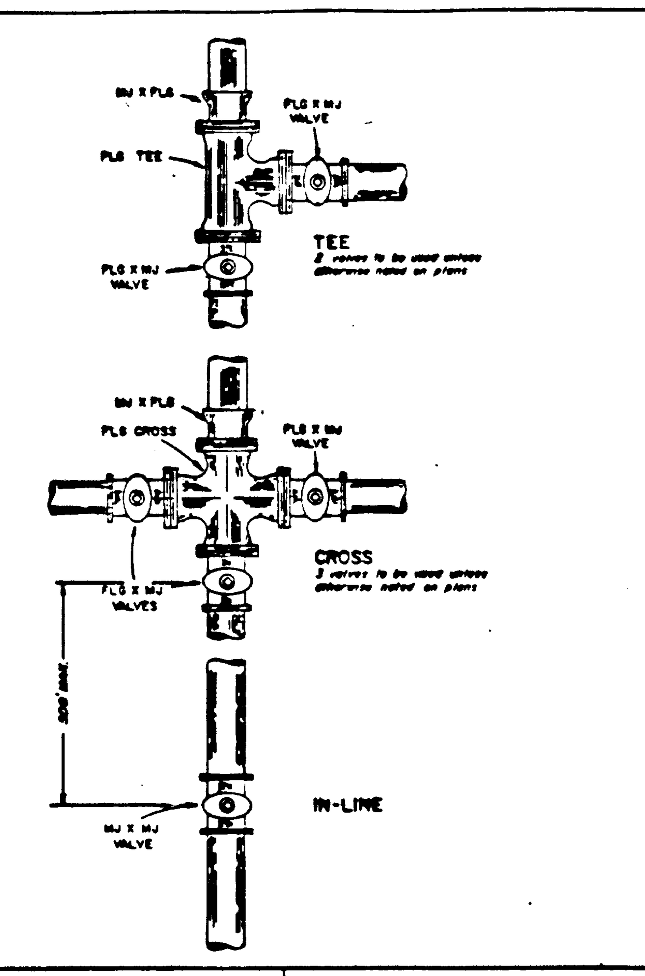
FITTING SIZE (in.)	TEE, WYE, PLUG or CAP	90° BEND, PLUGGED CROSS	TEE PLUGGED ON RUN A	TEE PLUGGED ON RUN A_1	45° BEND	22½° BEND	11¼° BEND
4	1.0	1.4	1.9	1.4	1.0	-	-
6	2.1	3.0	4.3	3.0	1.6	1.0	-
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.5	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	33.3	47.0	33.3	18.0	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8

NOTES

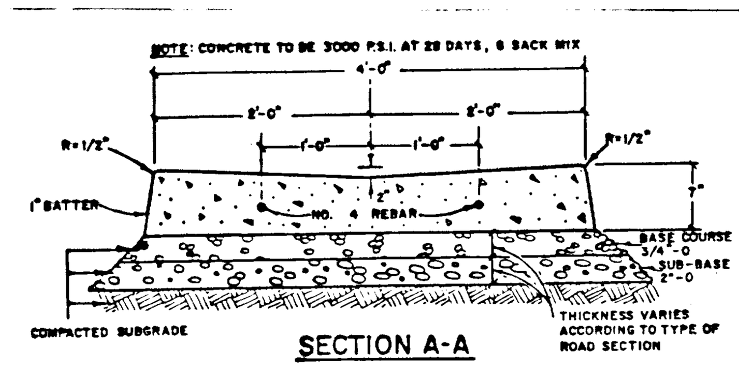
1. Concrete shall be poured against undisturbed earth.
2. Concrete shall be kept clear of joint and accessories.
3. The required thrust bearing area for special connections is shown encircled on the plans. For example, (15) indicates 15 SQ. FT. bearing area required.
4. If not shown on plans, required bearing area of fitting shall be as indicated above, adjusted if necessary to conform to the test pressures and allowable soil bearing stresses stated in the special specifications.
5. Bearing areas and special blocking details shown on the plans shall take precedence over this standard.
6. Above bearing areas are based on a test pressure of 150 P.S.I. and an allowable soil bearing stress of 2000 LBS./SQ. FT. To compute bearing areas for different test pressures and soil bearing stresses, use the following equation:

$$\text{BEARING AREA} = \text{TABLE VALUE} \times \frac{\text{TEST PRESSURE}}{150} \times \frac{2000}{\text{SOIL BEARING STRESS}}$$

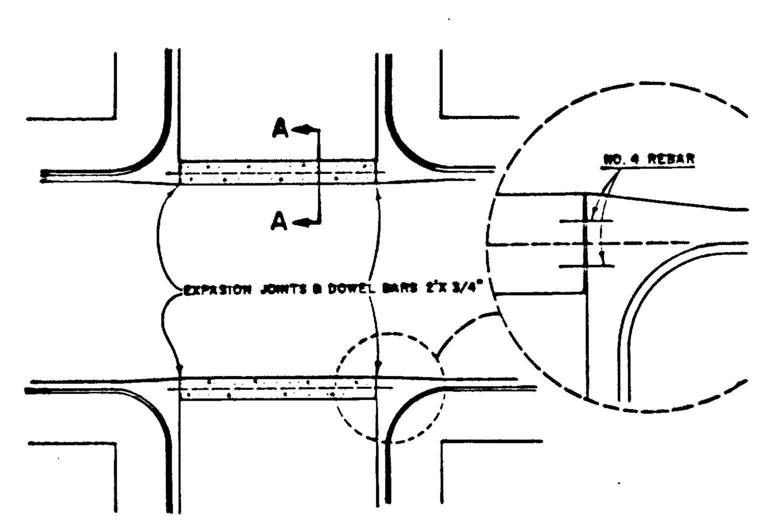
CITY OF WEST LINN	THRUST BLOCKING	
DRAWN BY DDP DATE 5-26-87		
CHECKED BY DATE	DWG. NO. TB - 302	
APPROVED BY Earl Reed DATE 5-27-87		



CITY OF WEST LINN	VALVE LOCATION	
DRAWN BY DDP DATE 5-26-87		
CHECKED BY DATE	DWG. NO. VL - 303	
APPROVED BY Earl Reed DATE 5-27-87		

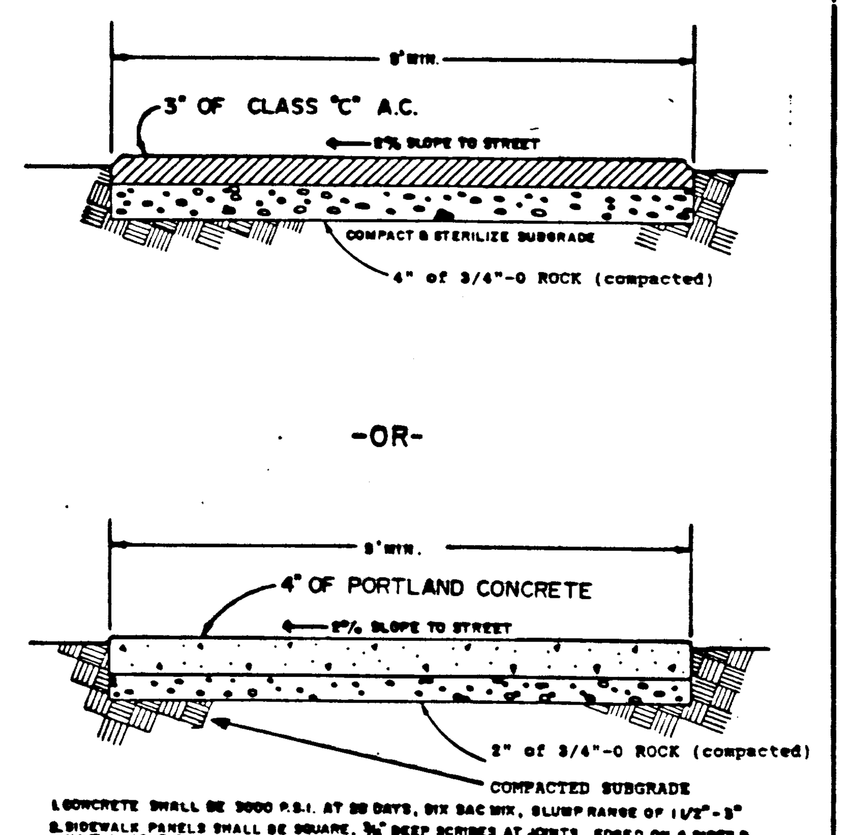


SECTION A-A



PLAN VIEW

WASHINGTON COUNTY DEPARTMENT OF LAND USE AND TRANSPORTATION			CROSS GUTTER	
DATE	CIVIL ENGINEER	DRAWN	APWA NO.	WASH. COUNTY NO.
1/17/86			NONE	CS-303



CITY OF WEST LINN	PEDESTRIAN PATH OR BIKEWAY	
DRAWN BY DDP DATE 5-20-87		
CHECKED BY DATE	DWG. NO. PP - 272	
APPROVED BY Earl Reed DATE 5-27-87		

DETAILS CITY OF WEST LINN ORDINANCE NO. 1238 JULY 14, 1988

GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIAL INCLUDED IN THIS CONTRACT SHALL COMPLY WITH "CITY OF WEST LINN STREET/UTILITY DESIGN AND CONSTRUCTION STANDARDS" AS ADOPTED JULY 14, 1989 AND WITH THE "1980 STANDARD SPECIFICATIONS AND DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OREGON CHAPTER APWA" IN CASE OF CONFLICT BETWEEN CITY STANDARDS AND APWA SPECIFICATIONS, THE CITY STANDARDS SHALL PREVAIL.

2. THE CONTRACTOR SHALL DO ALL WORK SHOWN ON THE DRAWINGS AND ALL TESTING AS REQUIRED IN CITY OF WEST LINN CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL DO ALL INCIDENTIAL WORK NECESSARY TO COMPLETE THE PROJECT IN AN ACCEPTABLE MANNER.

3. ALL PAVEMENT, CURB AND GUTTER, STREET BARRICADES ASSOCIATED WITH STUB STREET REMOVAL AND CONSTRUCTION ACTIVITIES AND ALL EXISTING RUBBISH SHALL BE REMOVED FROM SITE AND TRANSPORTED TO A SUITABLE DISPOSAL AREA.

4. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL USE SUCH EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SILTING EXISTING PUBLIC STREETS OR ADJACENT PROPERTIES. THESE MEASURES MAY INCLUDE PLACEMENT OF STRAW BALES OR OTHER MEANS APPROVED BY THE CITY ENGINEER.

5. CONTRACTOR SHALL REPLACE STREET SECTION ALONG NEW CURB AND GUTTER PER DETAIL SHEET. AGGREGATE BASE AND TOP COURSE WITHIN RIGHT-OF-WAY AND PRIVATE STREETS SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY ASSHTO T-99.

6. SANITARY SEWER PIPE SHALL BE CONCRETE PIPE, ASTM C-14 TYPE 1; OR PVC PLASTIC ASTM D-3034 CONFORMING TO CITY OF WEST LINN CONSTRUCTION STANDARDS. LOT SERVICE LINES SHALL HAVE A MINIMUM GROUND COVER OF 2 FEET AND MINIMUM SLOPE OF 0.0060 FT/FT. (6").

7. EXISTING UNDERGROUND POWER, TELEPHONE AND GAS LINES NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO FIELD LOCATE ANY EXISTING UTILITIES PRIOR TO CONSTRUCTION.

8. TOPOGRAPHY SHOWN REPRESENTS EXISTING GROUND PRIOR TO CONSTRUCTION OF WILDWOOD DRIVE, TOPOGRAPHY MAY VARY.

9. TEMPORARY BENCH: EXISTING STORM MANHOLE NO. 4 (STA 1+95) IN WILDWOOD DRIVE; RIM: 465.20

10. ALL WATERLINE MAINS SHALL HAVE A MINIMUM GROUND COVER OF 3 FEET.

11. STORM SEWER PIPE SHALL BE CONCRETE PER ASTM C-14 CLASS 3, OR APPROVED EQUAL BY ENGINEER. CONCRETE PIPE MAY BE EITHER TONGUE AND GROVE MORTARED JOINT OR BELL AND SPIGOT WITH GASKET.

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NO.	DATE	REVISION	BY
1	10/9/92	ADD EROSION NOTES	MVL

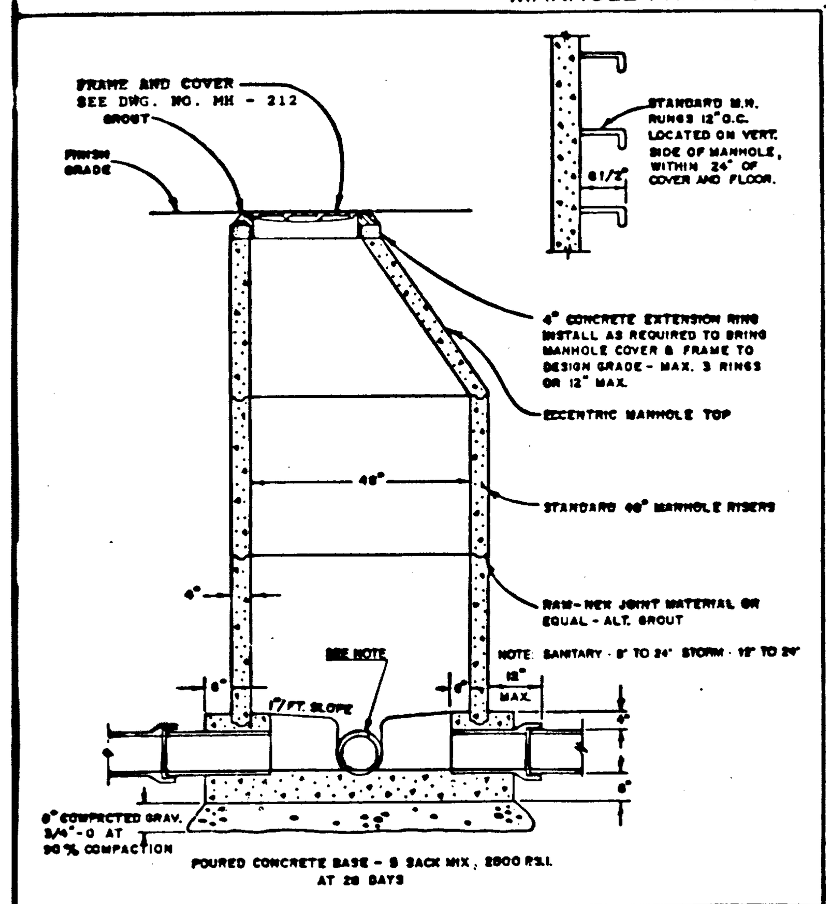
DESIGNED BY DRF DATE FEB 92
DRAWN BY DRF DATE FEB 92
REVIEWED BY MVL DATE FEB 92
PROJECT NO. 223-002
SCALE NONE

CITY OF WEST LINN
EROSION CONTROL DETAILS & NOTES AND CONSTRUCTION NOTES/DETAILS

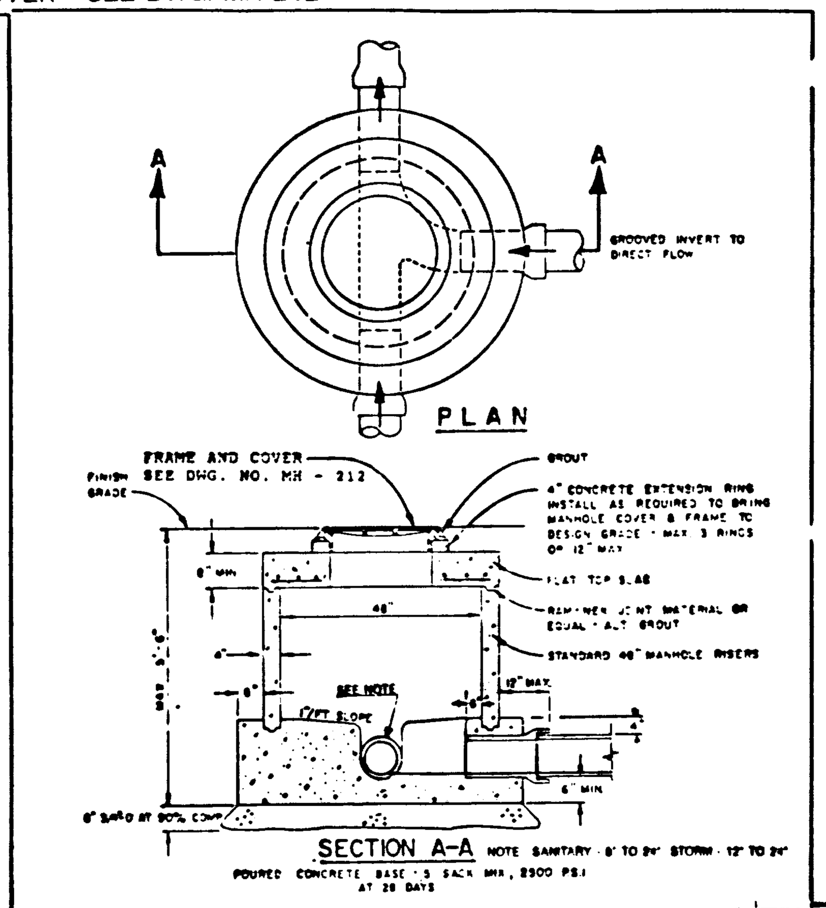
SHEET 6 OF 7

PROJECT HAVERHILL EST.
NO. 223-002
TYPE CONSTR. PLANS

MANHOLE FRAME & COVER - SEE DWG. MH-212

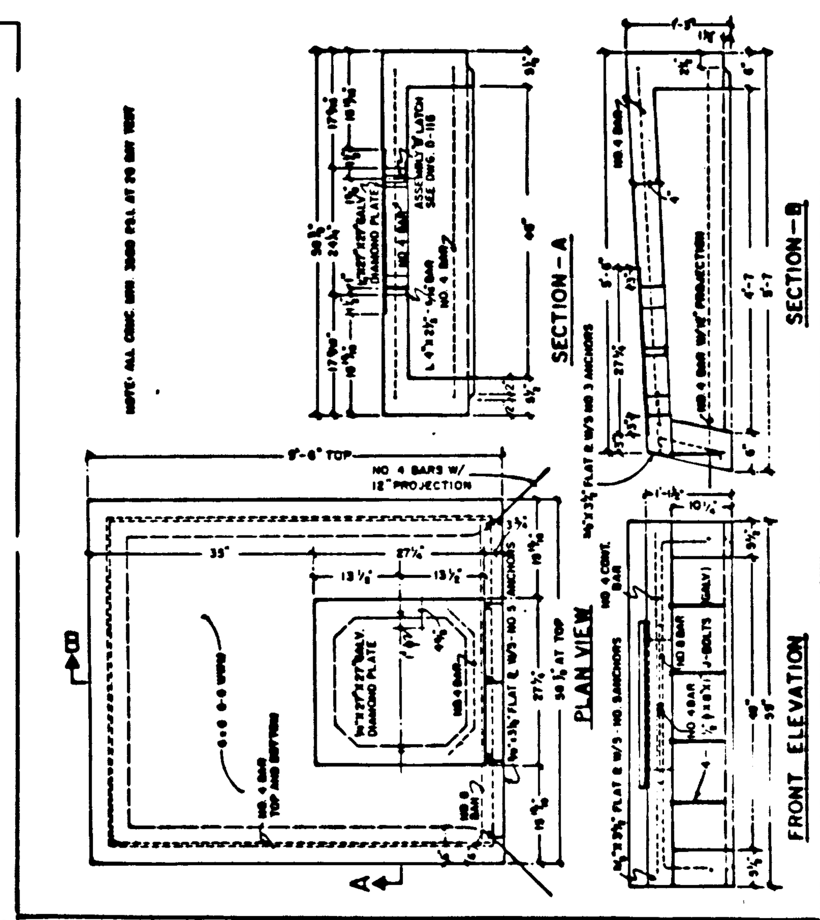


CITY OF WEST LINN	STANDARD MANHOLE
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DKK DATE 5-27-87 / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. MH - 209

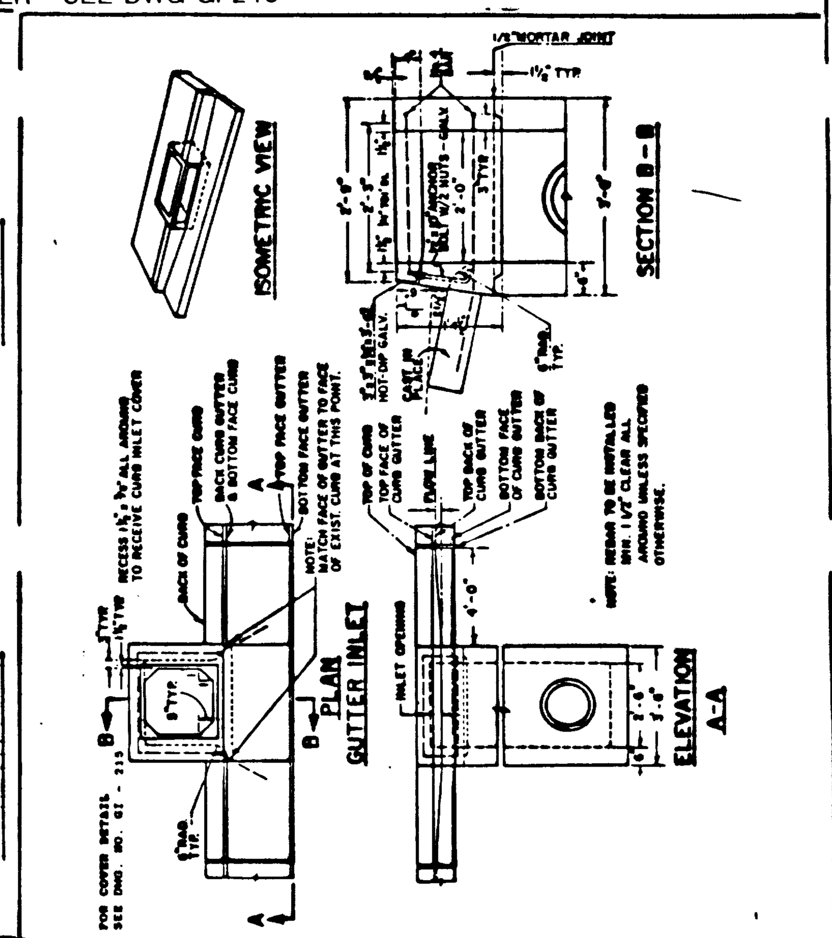


CITY OF WEST LINN	SHALLOW MANHOLE
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DKK DATE 5-27-87 / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. MH - 210

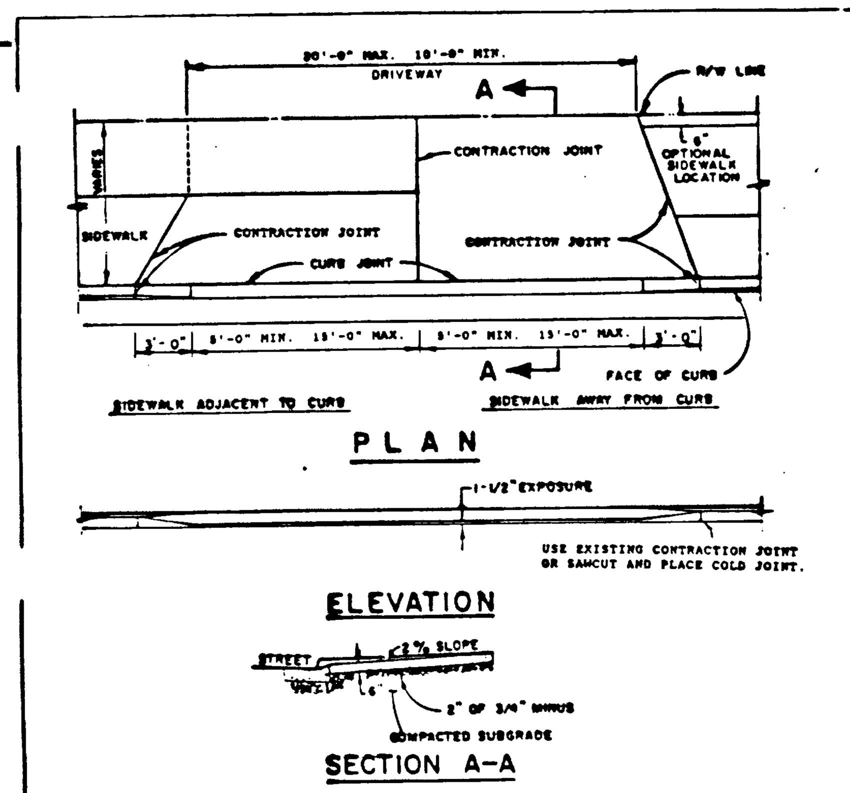
GUTTER INLET COVER - SEE DWG GI-215



CITY OF WEST LINN	GUTTER INLET-4A
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. GI - 213

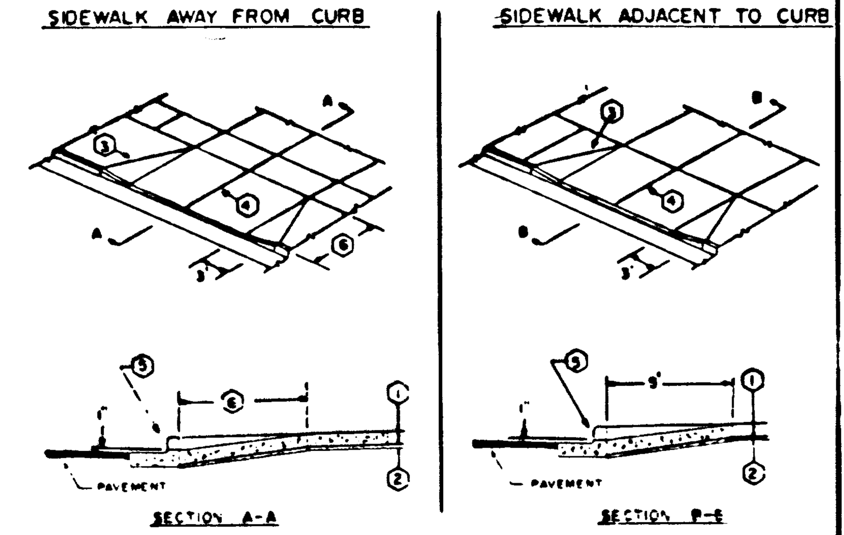


CITY OF WEST LINN	GUTTER INLET-2½A
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. GI - 214



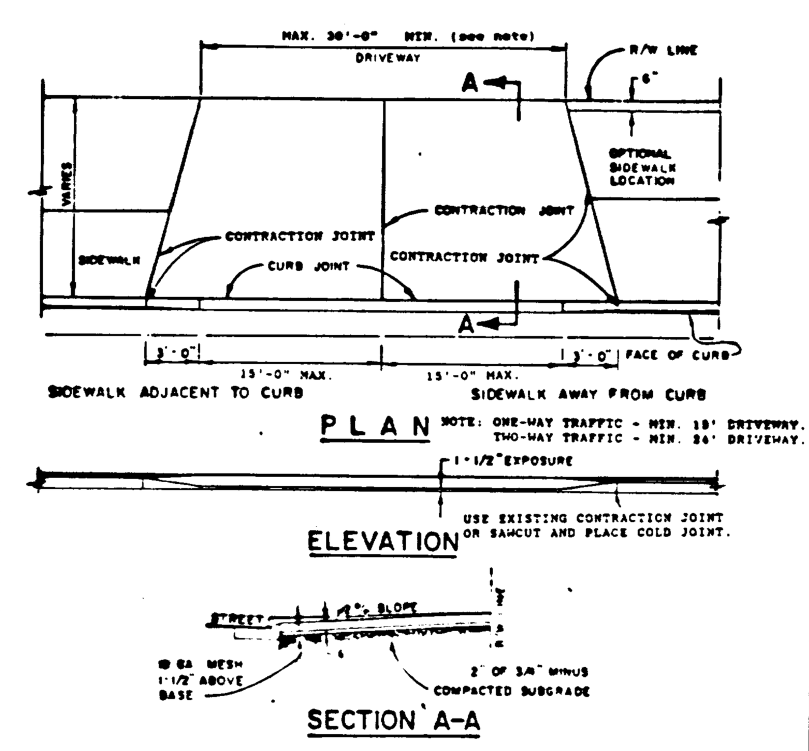
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3000 PSI AFTER 28 DAYS, 6 SACK MIX.
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB.
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK.

CITY OF WEST LINN	RESIDENTIAL DRIVEWAY
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. DW - 250



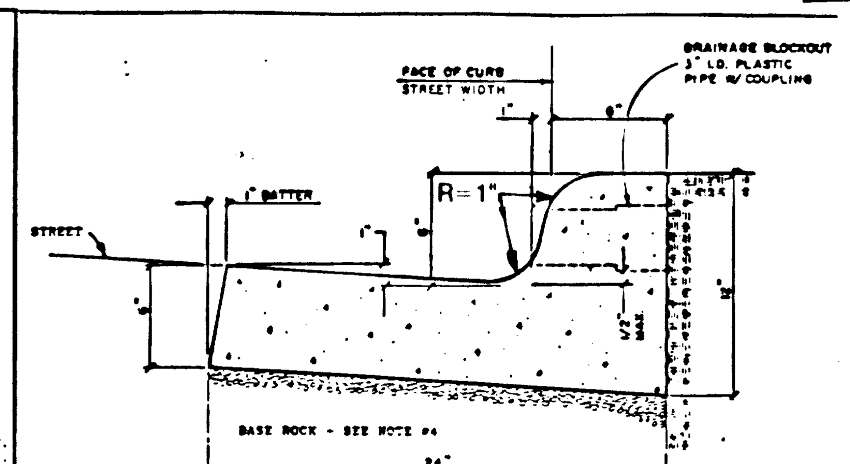
1. Min. thickness shall be 6".
2. 2" of compacted 3/4"-0 aggregate, over compacted subgrade.
3. 1" min. deep contraction joints shall be placed at sides of driveway approach.
4. For a 20' driveway, a 1" deep contraction joint shall be placed at the center. An additional joint shall be installed for each additional 10' of driveway width.
5. In areas of curb removal: For standard curb, excavation shall be to bottom of curb. For curb & gutter, excavation shall be extended to 18" below top of curb.
6. For sidewalk less than 5' from back of curb, approach shall extend thru the sidewalk.
7. Concrete shall have min. compression strength of 3000 PSI after 28 days.
8. A curing compound is required. White reflective sheeting shall be used in case of rain.
9. The surface finish shall be by cross brooming.

CITY OF WEST LINN	RESIDENTIAL DRIVEWAY DETAILS
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. DW - 251



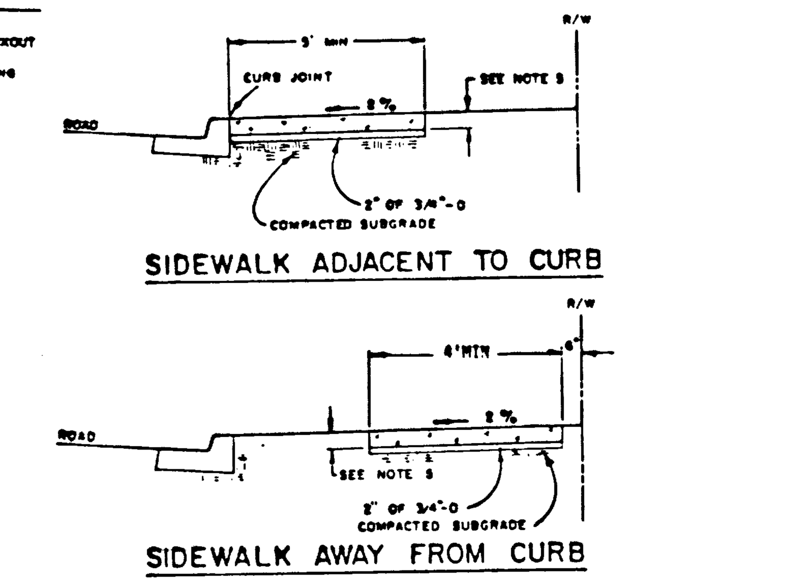
1. CONCRETE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 3000 PSI AFTER 28 DAYS, 6 SACK MIX.
2. CURB JOINT SHALL BE A TROWELED JOINT WITH A MIN. 1/2" RADIUS ALONG BACK OF CURB.
3. DRIVEWAY SHALL BE A MINIMUM 6" THICK.

CITY OF WEST LINN	COMMERCIAL DRIVEWAY
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. DW - 260



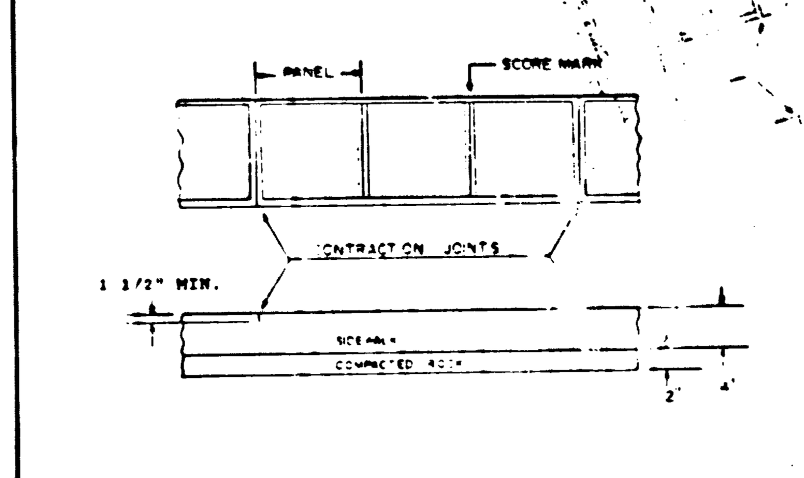
1. When used along medians, gutters may be reduced with prior approval from the City Engineer.
2. Concrete shall have a breaking strength of 3000 PSI after 28 days.
3. CONTRACTION JOINTS
   A. To be provided:
      1) at each point of tangency of the curb
      2) at each cold joint
      3) at each side of inlet structures
      4) at both sides of an approach
   B. Spacing to be not more than 15 feet.
   C. The depth of the joint shall be at least 1 1/2".
4. Base rock - 1 1/2" minus, 95% compaction. Rock shall be to subgrade of street structure or 4" in depth, whichever is greater.
5. Drainage block - 3" dia. plastic pipe.
   A. Drainage access through existing curbs shall be by the following:
      1) core drilling.
      2) vertical saw-cut of curb 18" each side of drain & repoured to full depth of curb.

CITY OF WEST LINN	CURB & GUTTER
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. CG - 265



1. Concrete shall be 300 PSI at 28 days, 6 sack mix, slump range of 1 1/2" to 3".
2. Panel lengths shall be equal to the sidewalk width, but may be adjusted with the City Engineers approval.
3. Contraction joints (1 1/2" deep) shall be placed every third panel, with a max. spacing of 15 feet.
   Joints shall also be placed at the sides of driveway approaches, utility vaults, and wheelchair ramps.
4. A curing compound shall be used. White reflective sheeting shall be used in case of rain.
5. For sidewalks adjacent to the curb & poured at the same time as the curb, the joint between them shall be a troweled joint with a min. 1/2" radius.
6. The sidewalk shall have a min. thickness of 6" if mountable curb is used or if the sidewalk is intended as a portion of the driveway. Otherwise, the sidewalk shall have a min. thickness of 4".
7. Drain blockouts in the curb shall be extended to the back of the sidewalk with a 3" dia. plastic pipe at a 2% slope. A contraction joint shall be placed over the pipe.

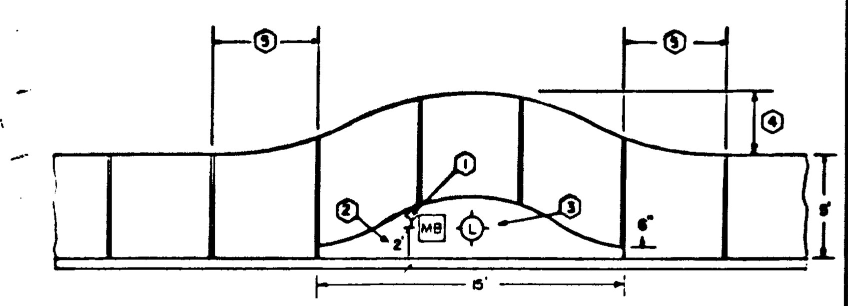
CITY OF WEST LINN	CONCRETE SIDEWALK
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DKK DATE 5-27-87 / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. CS - 270



NOTES

1. EXPANSION JOINTS SHALL NOT BE USED.
2. 1 1/2" MIN. DEEP CONTRACTION JOINTS SHALL BE PLACED AT SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, WHEELCHAIR RAMPS, & AT TRANSVERSE SPACING NOT TO EXCEED 15 LF.
3. CONTRACTION JOINTS SHALL MATCH THE EXISTING CURB JOINTS & TRAVEL THRU FULL WIDTH OF SIDEWALK.
4. PANEL LENGHTS SHALL BE EQUAL TO THE SIDEWALK WIDTH, BUT MAY BE ADJUSTED WITH THE CITY INSPECTORS APPROVAL.
5. SCORE MARKS SHALL BE PLACED PRIOR TO EDGING & BE REMOVED AT SIDES BY THE EDGING.

CITY OF WEST LINN	CONCRETE SIDEWALK JOINT DETAILS
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. CS - 270.1



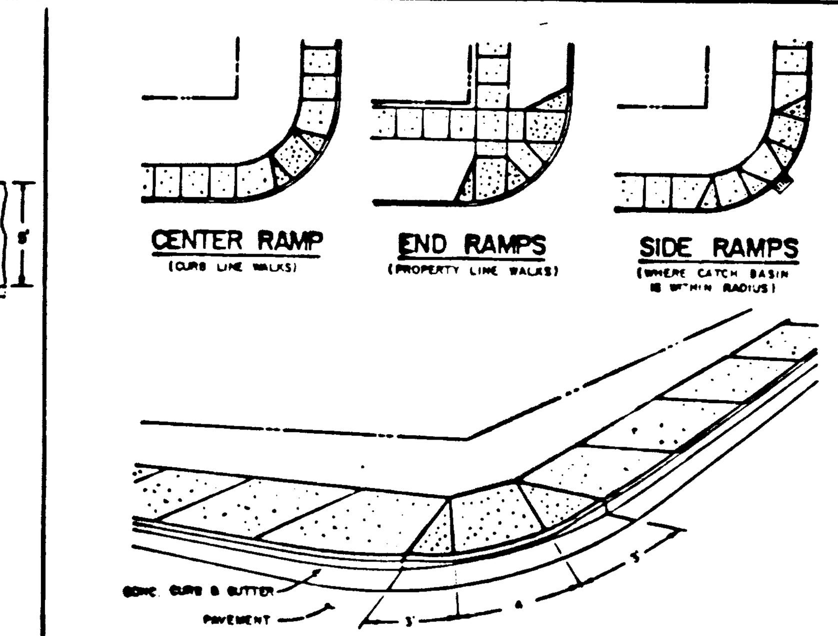
SPECIFICATIONS

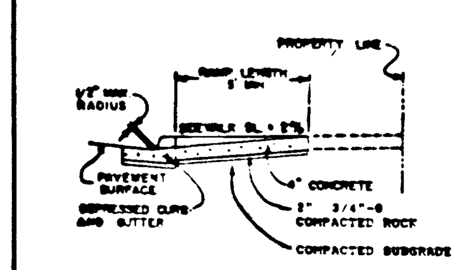
1. Min. 9" clearance between face of sidewalk & closest point on back of mailbox.
2. Center of mailbox shall be 2' from face of curb.
3. Light poles & firehydrants are to be centered in island.
4. 2' for firehydrants & light poles. 3' for mailboxes.
5. The reverse curve shall extend 5' beyond the rerouted area.

GENERAL NOTES

1. Sidewalks to be rerouted around all light poles, mailboxes, & firehydrants that exist in the sidewalk area.
2. Mailboxes shall not be installed adjacent to firehydrants.
3. Sidewalks shall not be rerouted if the existing meter boxes, utility poles, transformers, ect., will be in the rerouted sidewalk.
4. If the sidewalk is in place prior to the installation of the light pole, mailbox, or firehydrant, then the sidewalk shall be removed and rerouted.

CITY OF WEST LINN	CONCRETE SIDEWALK CLEARANCES
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DKK DATE 5-27-87 / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. CS - 270.2

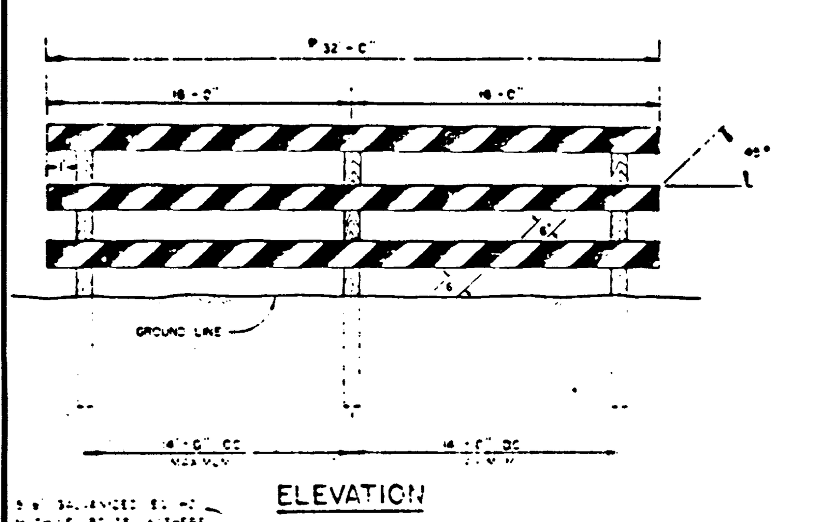


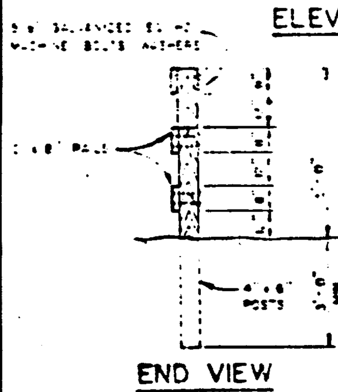


1. For sidewalk details, see Dwg. No.'s CS - 270 & CS - 270.1
2. See Dwg. No. CG - 265 for curb and gutter detail.
3. Ramp width shall be as shown hereon unless otherwise approved by the City Engineer.
4. Concrete shall be 3000 PSI at 28 days, 6 sack mix, slump range 1½" to 3".

CITY OF WEST LINN	SIDEWALK RAMP
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. CS - 271

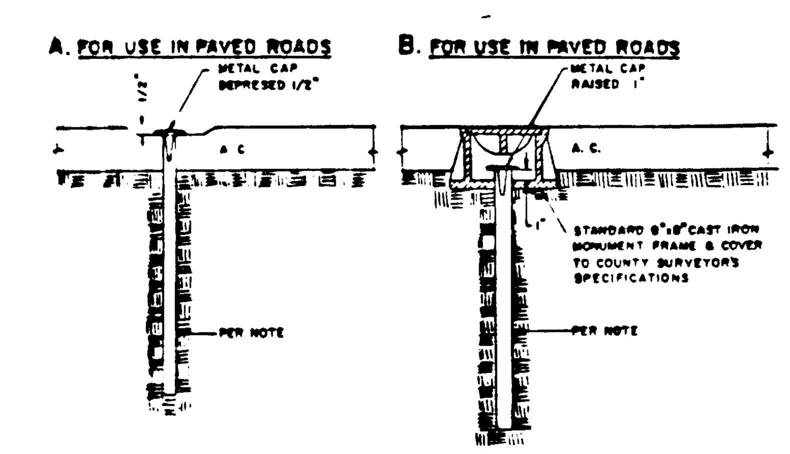
ALL DETAILS THIS SHEET CITY OF WEST LINN ORDINANCE NO. 1238 JULY 14, 1988

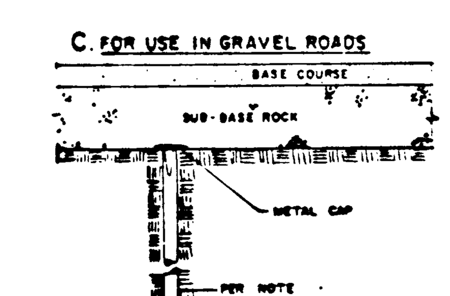




NOTES
1. RAILS TO BE PAINTED BLACK WITH WHITE STRIPES. THE WHITE STRIPES SHALL BE REFLECTORIZED
* FOR WIDER APPLICATIONS, MULTIPLE SECTIONS AS SHOWN SHALL BE USED
2. SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE OREGON SUPPLEMENT
   3F-1 BARRICADES
   6C-8 BARRICADE DESIGN
   6C-9 BARRICADE APPLICATION
3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OREGON STANDARD SPECIFICATIONS FOR HWY CONSTRUCTION.

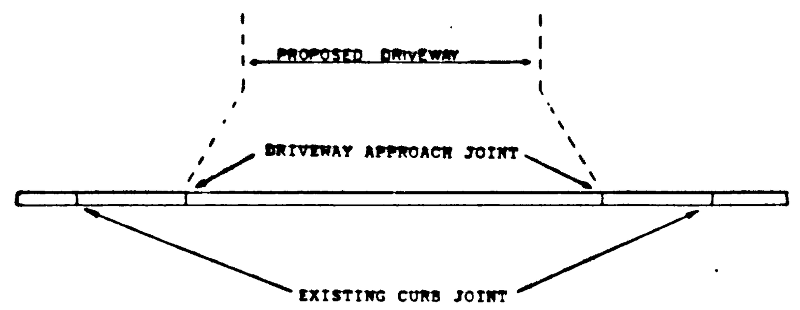
CITY OF WEST LINN	STREET BARRICADE -TYPE III
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. SB - 276





NOTE: ALL MONUMENTS SHALL USE EITHER 5/8" DIA X 30" LONG IRON ROD OR 3/4" I. DIA. X 30" LONG IRON PIPE.
ALL MONUMENTS SHALL BE IN ACCORDANCE WITH ORS 209 250(4).

CITY OF WEST LINN	CENTERLINE SURVEY MONUMENTS
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. SM - 278

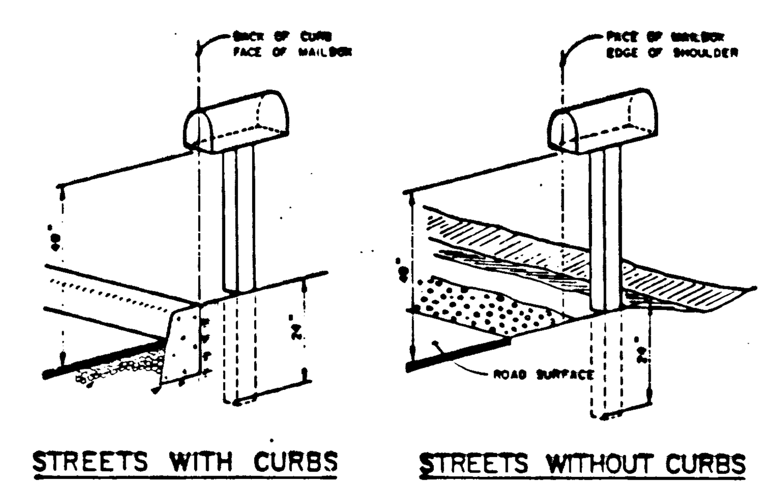


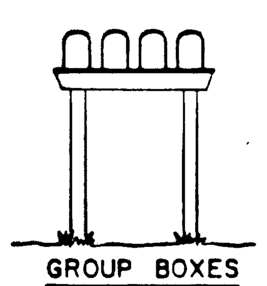
NOTES

1. FOR THE INSTALLATION OF A DRIVEWAY APPROACH, THE REMOVAL OF CURB SHALL ADHERE TO THE FOLLOWING:
   A. FOR STANDARD CURB, IF THE EXISTING CURB JOINT IS 8 FEET OR LESS FROM THE DRIVEWAY APPROACH JOINT, REMOVAL SHALL BE TO THE EXISTING CURB JOINT.
   B. IF THE EXISTING CURB JOINT IS MORE THAN 8 FEET FROM THE DRIVEWAY APPROACH JOINT, OR IF THE AREA IS CURB & GUTTER, THEN THE TOP AND FACE OF THE CURB SHALL BE SAW-CUT TO A MIN. DEPTH OF 2" PRIOR TO REMOVAL.
   C. THE REMOVAL OF CURB TO THE EXISTING CURB JOINT MAY BE ADJUSTED UPON THE CITY'S APPROVAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF CURB DAMAGED DUE TO CONSTRUCTION.

   AN INSPECTION OF THE CURBS SHALL BE PREFORMED PRIOR TO FINAL APPROVAL FOR OCCUPANCY.

CITY OF WEST LINN	CURB REMOVAL & DAMAGE INSPECTION
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. CR - 273

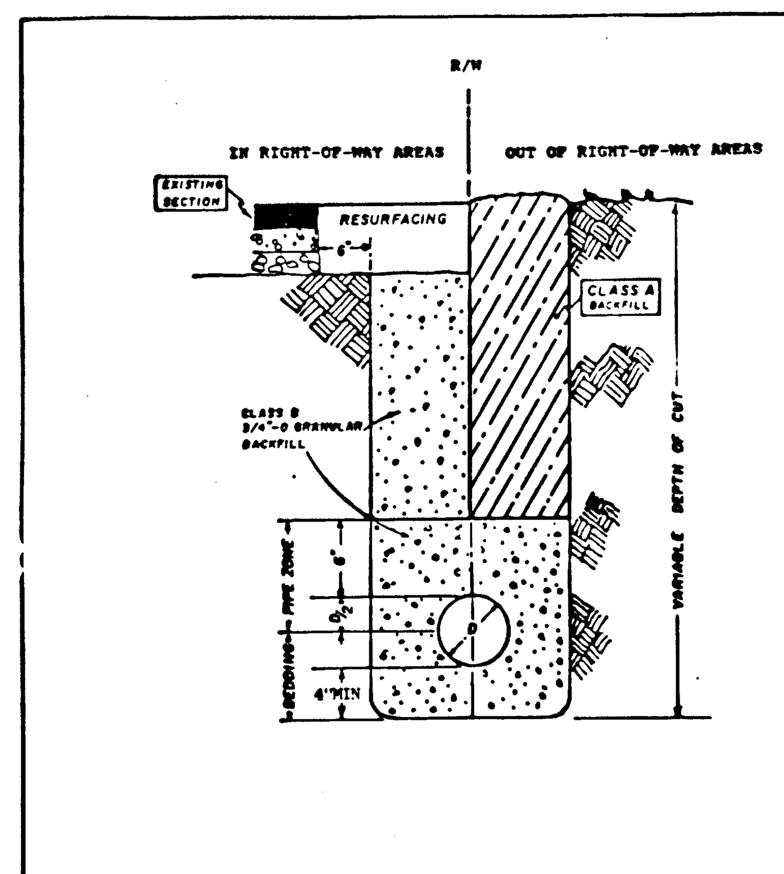




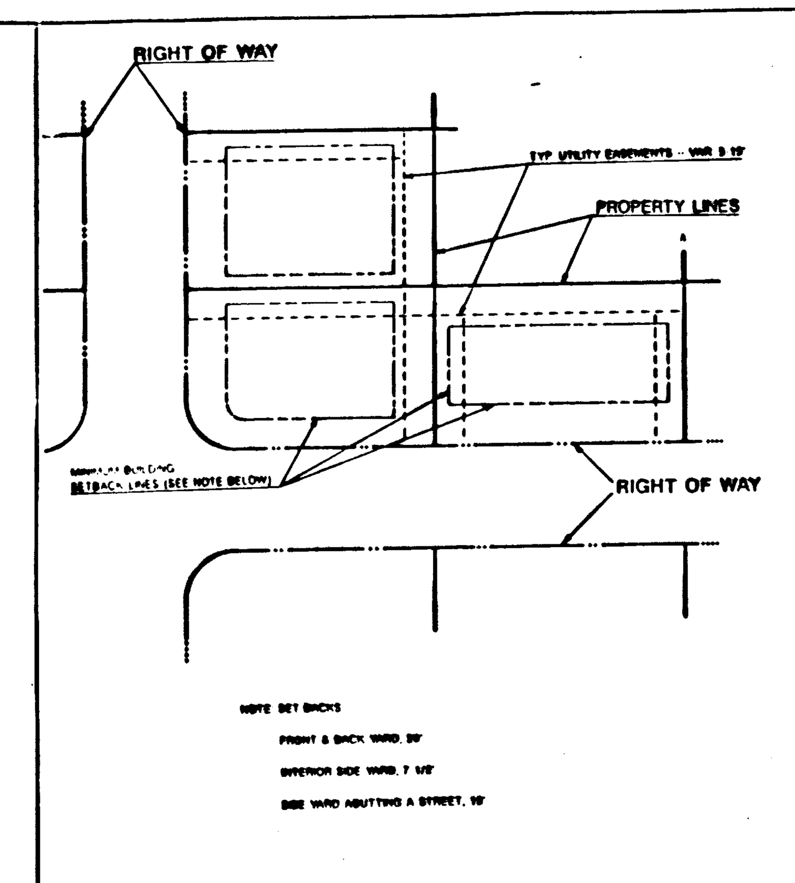
NOTES

1. BOX NUMBER AND NAMES SHALL BE NOT LESS THAN ONE INCH HIGH.
2. POSTS MUST BE PRESSURE TREATED AND MINIMUM 4"x4".
3. ALL MAILBOX LOCATIONS AND CLUSTERS MUST CONFORM TO REQUIREMENTS OF THE UNITED STATES POSTAL SERVICE.

CITY OF WEST LINN	MAILBOX LOCATION
DRAWN BY DDP DATE / CHECKED BY DATE / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. MB - 275



CITY OF WEST LINN	PIPE BEDDING AND BACKFILL DETAILS
DRAWN BY DDP DATE 5-20-87 / CHECKED BY DKK DATE 5-27-87 / APPROVED BY Earl Reed DATE 5-27-87	DWG. NO. PB - 290



CITY OF WEST LINN	UTILITY EASEMENT (RESIDENTIAL)
DRAWN BY DPT DATE 1-26-88 / CHECKED BY J Montgomery DATE 1-26-88 / APPROVED BY Earl Reed DATE 1-26-88	DWG. NO. UE - 282

ALPHA ENGINEERING INC.
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DATE	REVISION	BY

DESIGNED BY DRF DATE MAR 9
DRAWN BY DRF DATE MAR 9
REVIEWED BY JMP DATE MAR 9
PROJECT NO. WEST LINN 223-002
SCALE SHOWN

CITY OF WEST LINN
EROSION CONTROL DETAILS & NOTES AND CONSTRUCTION NOTES/DETAILS

SHEET 7 OF 7

PROJECT WEST LINN
NO. 223-002
TYPE CONSTRUCTION