PHASE II

BARRINGTON HEIGHTS

W.B. WELLS AND ASSOCIATES, INC.
ENGINEERS
SURVEYORS
4230 N.E. FREMONT ST.
PORTLAND, OR 97213
PHONE: (503) 284-5896

CONSTRUCTION NOTES

WATERLINES:

1. FOR TEMPORARY WATERLINE SEE NOTES ON SHEET 13 OF 18.
2. ALL MAINLINE PIPE SHALL BE DUCTILE IRON, CLASS 52 (AWWA C-151-76) WITH TYTON JOINTS. ALL THRUST BLOCKS, FIRE HYDRANTS, TRENCH BACKFILL, WATER SERVICE AND BLOWOFFS SHALL BE AS SHOWN ON THE DETAIL SHEET.
3. ALL PIPE SHALL HAVE 30" MINIMUM COVER MEASURED FROM FINISHED SUBGRADE AND SHALL COMPLY WITH REGULATIONS OF THE OREGON STATE BOARD OF HEALTH AND THE DEPARTMENT OF ENVIRONMENT QUALITY REGARDING THE LOCATION AND SEPARATION OF WATERLINES AND SANITARY SEWER.
4. UPON COMPLETION OF INSTALLATION OF THE WATER SYSTEM, ALL LINES SHALL BE FLUSHED AND DISINFECTED IN COMFORMANCE WITH HEALTH DIVISION GUIDELINES. CONTRACTOR SHALL PRESSURE TEST ALL LINES. TEST PRESSURE OF 150 PSI SHALL BE HELD FOR TWO HOURS UNTIL TEST RESULTS ARE SATISFACTORY. PIPELINES TO BE TESTED IN ACCORDANCE WITH A.P.W.A. DIVISION IV, SECTION 402.3.04. TESTING TO BE OBSERVED BY THE ENGINEER AND THE CITY.
5. WATER SERVICES TO BE 1" (TYPE K SOFT) COPPER FOR DOUBLE SERVICES AND 3/4" COPPER (TYPE K SOFT) FOR SINGLE SERVICE. CORPORATION STOP TO BE FORD F1000 AND SERVICE TEE TO BE FORD T 444-443 COMPRESSION FITTINGS. METER BOXES WILL BE INSTALLED BY CONTRACTOR AND SHALL BE NO. 1 METER BOX MFG. BY METER BOX EQUIPMENT CO., TIGARD, OR.
6. FIRE HYDRANTS ARE TO BE OF THE DRY BARREL, WATEROUS TYPE, COMPLYING WITH A.W.W.A. C502.
7. GATE VALVES ARE TO BE NRS TYPE WITH 2" OPERATING NUT, COUNTER-CLOCKWISE OPENING, CONFORMING TO A.W.W.A. C500.
8. PIPELINE TO BE DISINFECTED IN ACCORDANCE WITH A.P.W.A. DIVISION IV, SECTION 402.3.05.

SANITARY SEWERS:

1. SANITARY SEWER PIPE SHALL BE 3034 PLASTIC PIPE. MANHOLES, CLEANOUTS, PIPE BEDDING AND TRENCH BACKFILL SHALL BE AS SHOWN ON THE DETAIL SHEET.
2. ALL SERVICE LATERALS TO BE CONSTRUCTED AT A MINIMUM SLOPE OF 1/4" PER LINEAR FOOT, UNLESS OTHERWISE SHOWN ON THE PLANS.
3. CONTRACTOR SHALL PRESSURE TEST ALL LINES BY APWA PROCEDURE OR APPROVED EQUIVALENT. ALL SEWER LINES ARE TO BE AIR TESTED PER A.P.W.A. DIVISION III, SECTION 503.5.16. TESTS ARE TO BE OBSERVED BY THE ENGINEER AND THE CITY.
4. SANITARY SEWER LATERALS SHALL BE PLUGGED & MARKED WITH A 2"X4" MARKER EXTENDED FROM THE END OF THE LATERAL TO A POINT 2' ABOVE FINISH GRADE AND LABELED "SANITARY SEWER LATERAL". THE DEPTH SHALL ALSO BE NOTED ON THE MARKER.
5. PIPE BEDDING SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF A.P.W.A. DVISION III, SECTION 301.2.02 FOR 3/4"-0 CRUSHED ROCK.
6. BACKFILL FOR TRENCHES WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF A.P.W.A. DIVISION III SECTION 301.2.04B FOR 1-1/2"-0 CRUSHED ROCK (CLASS B BACKFILL).
7. TRENCHES OUTSIDE THE RIGHT-OF-WAY MAY BE BACKFILLED WITH MATERIAL EXCAVATED FROM THE TRENCH IN ACCORDANCE WITH A.P.W.A. DIVISION III, SECTION 301.2.04A (CLASS A BACKFILL).

CONSTRUCTION NOTES

GENERAL

1. CONSTRUCTION SHALL CONFORM WITH CITY OF WEST LINN STANDARDS & SPECIFICATIONS AND A.P.W.A. OREGON CHAPTER SPECIFICATIONS AND STANDARD DETAILS.
2. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
3. CONTRACTOR SHALL HAVE MARKED EXISTING UTILITIES (I.E.:GAS & WATER) PRIOR TO CONSTRUCTION.
   A. CONTRACTOR SHALL COORDINATE WITH THE GAS COMPANY TO RELOCATE ANY GAS LINES TO AN ACCEPTABLE LOCATION.
   B. EXISTING WATERLINE TO BE RELOCATED, SEE SHEET 12 OF 17 FOR NOTES.
4. CONTRACTOR SHALL KEEP CITY ENGINEER & ENGINEER ADVISED OF HIS PROGRESS SO THAT INSPECTIONS CAN BE PERFORMED IN AN EFFICIENT MANNER. 24 HR. NOTICE MUST BE GIVEN FOR INSPECTIONS OR TESTS.
5. THE CONTRACTOR SHALL DO ALL OF THE WORK SHOWN ON THE DRAWINGS AND ALL INCIDENTAL WORK CONSIDERED NECESSARY TO COMPLETE THE PROJECT IN AN ACCEPTABLE MANNER.
6. ALL MATERIAL SUPPLIER(S) SHALL SUBMIT TO THE ENGINEER PROOF OF MATERIAL(S) TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATIONS AND SHALL CERTIFY THAT ALL MATERIAL TO BE DELIVERED TO THE JOB SITE MEETS OR EXCEEDS SAID SPECIFICATIONS PRIOR TO DELIVERY TO THE SITE. ANY MATERIAL NOT CERTIFIED BY THE SUPPLIER SHALL BE REMOVED FROM THE JOB SITE AT NO ADDITIONAL COST TO THE OWNER. "NO REJECT MATERIAL ALLOWED ON THE SITE".

STREETS & GRADING: SEE SHEET 2 OF 18

STORM SEWERS:

1. STORM SEWER PIPE SHALL BE ASTM C-14 CLASS 2 WITHOUT RUBBER GASKETS. CATCH BASINS, INLETS, PIPE BEDDING AND TRENCH BACKFILL SHALL BE AS SHOWN ON THE DETAIL SHEET.
2. ALL STORM SEWER LATERALS SHALL BE MARKED WITH A 2"X4" MARKER EXTENDING FROM THE END OF THE LATERAL TO A POINT 2' ABOVE FINISH GRADE AND MARKED 4" STORM LATERAL. THE DEPTH SHALL BE NOTED ON THE MARKER.
3. ALL PRIVATE STORM SEWER LATERALS SHALL CONFORM TO OREGON STATE PLUMBING CODE.
4. PIPE BEDDING SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF A.P.W.A. DIVISION III. SECTION 301.2.02 FOR 3/4"-0 CRUSHED ROCK.
5. BACKFILL FOR TRENCHES WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE MATERIAL REQUIREMENTS OF A.P.W.A. DIVISION III, SECTION 301.2.04B FOR 1-1/2"-0 CRUSHED ROCK (CLASS B BACKFILL).
6. TRENCHES OUTSIDE THE RIGHT-OF-WAY MAY BE BACKFILLED WITH MATERIAL EXCAVATED FROM THE TRENCH IN ACCORDANCE WITH A.P.W.A. DIVISION III, SECTION 301.2.04A (CLASS A BACKFILL).

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2	SITE/GRADING PLAN
3	SITE/GRADING PLAN
4	STREET & STORM SEWER PLAN
5	STREET & STORM SEWER PLAN
6	RIVERKNOLL WAY PROFILE
7	BARRINGTON DRIVE PROFILES & INTERSECTION DETAILS
8	RIVERKNOLL COURT PROFILES & DETAILS
9	STORM SEWER PROFILE LINE "A"
10	STORM SEWER PROFILES LINES "B", "B-1" & "A-1"
11	OFF-SITE SANITARY SEWER PLAN & PROFILES
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13	SANITARY SEWER & WATER PLAN
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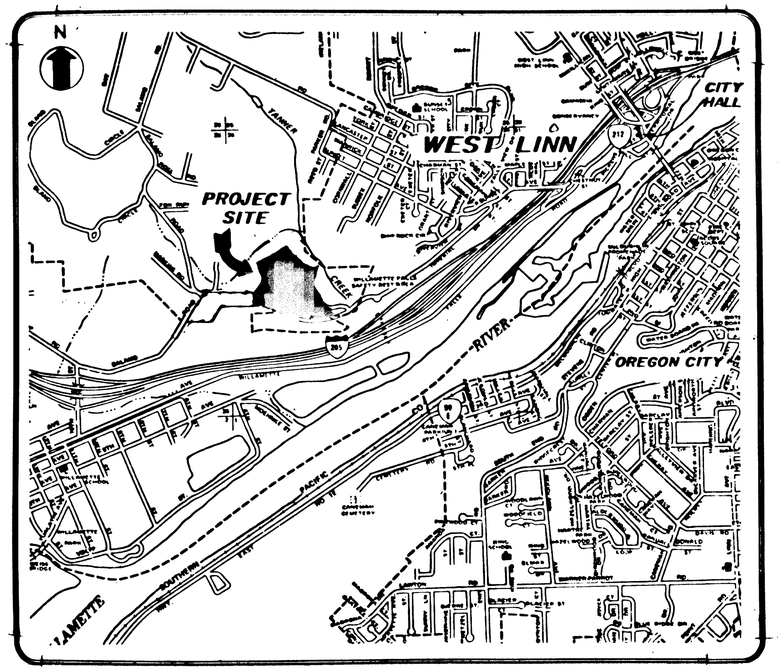
17	SANITARY SEWER PROFILES LINES "B-2" & "B-2-1"
18	STANDARD DETAILS



VICINITY MAP
(N.T.S.)

APPROVED NOV. 1986

DESIGNED: BSS D.W.M.	SCALE: NO SCALE
CHECKED: B.S.S. D.W.M.	FILE NO: 86-158
DRAWN: M.J.B.	REVISED
DATE: SEPT. 1986	

CITY OF WEST LINN
DEPT. OF PUBLIC WORKS
EARL REED
PUBLIC WORKS DIRECTOR

BARRINGTON HEIGHTS
FOR: IMPERIAL DEVELOPMENT INC.

IMPERIAL DEVELOPMENT, INC.
Attn: Mr. Neil Nedelisky
15875 S.E. 114th Street, Suite "D"
Clackamas, Oregon 97015
phone: (503) 655-6291

SITE GRADING CONSTRUCTION NOTES

CONSTRUCTION NOTES:

1. Contractor shall remove and dispose of all cleared and grubbed material, including but not limited to trees, stumps, limbs, rocks, boulders, roots, brush and debris. All cleared and grubbed material shall be disposed of off the site in accordance with all state, federal, and local regulations. No on-site disposal of clear and grubbed material is allowed.
2. No construction activity to be within areas depicted as areas to leave in their natural state.
3. All trees 6 inch caliper and greater in cut or fill areas of three (3) feet or less area to remain unless directed by the city in writing. Care is to be taken to protect the root systems from cutting or suffocation.
4. EMBANKMENT NOTES:
   - A. Embankment materials shall be free from organics, frozen material, concrete, asphalt concrete and other debris.
   - B. Embankment shall be constructed in successive horizontal layers not exceeding eight (8) inches in loose thickness. The use of loaded hauling equipment will be acceptable in all but the last two (2) feet of fill for compaction, provided the required density is obtained throughout the width and depth of each layer. The top two (2) feet shall be compacted using suitable mechanical compactor.
   - C. Compact each lift as follows:
     1. All but top two (2) feet 90% of AASHTO T-180.
     2. Top two (2) feet 95% of AASHTO T-180.
   - D. The material in each layer shall be of a moisture content to meet the above compaction requirement. Wetting or drying of the material and manipulation to secure a uniform moisture content throughout the layer may be required. Should the materials be to wet too permit proper compaction by rolling, all work on all portions of the fill thus affected shall be delayed until the material has dried to an acceptable moisture content.
   - E. The owner and engineer shall reserve the right to call for compaction tests. If the tests do not show suitable results, the contractor shall correct it at no cost to the owner.
   - F. 2:1 slopes shall be groomed prior to hydroseeding.
   - G. All fill areas outside of R/W shall be hydroseeded for erosion control. If erosion creates channels on slope banks or at low areas, hay bales shall be deposited at said locations.
5. All earthwork shall comply with A.P.W.A. Division II Section 24, including amendments.

STREET NOTES:

1. Subgrade and aggregate base (prior to paving) shall be proof rolled, in the presence of the Engineer and the City of West Linn Engineering Inspector, using a 10-yard dump truck loaded with 3/4"-0 crushed rock.
2. All underground utilities, including water services and utility crossings shall be constructed prior to subgrade proof rolling or curb construction.
3. Two (2) 3" diameter curb rain drain outlets are to be provided per lot, within 5 feet of the property line, unless storm sewer service is provided.
4. Curbs shall be stamped with an "S" for sanitary sewers and a "W" for water, placed directly over the spot that the lateral service line passes under the curb.

CONSTRUCTION STAGING THIS SHEET

STAGE 1: MASS GRADING COMPLETE.

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ENGINEERS SURVEYORS
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PORTLAND, OR 97213
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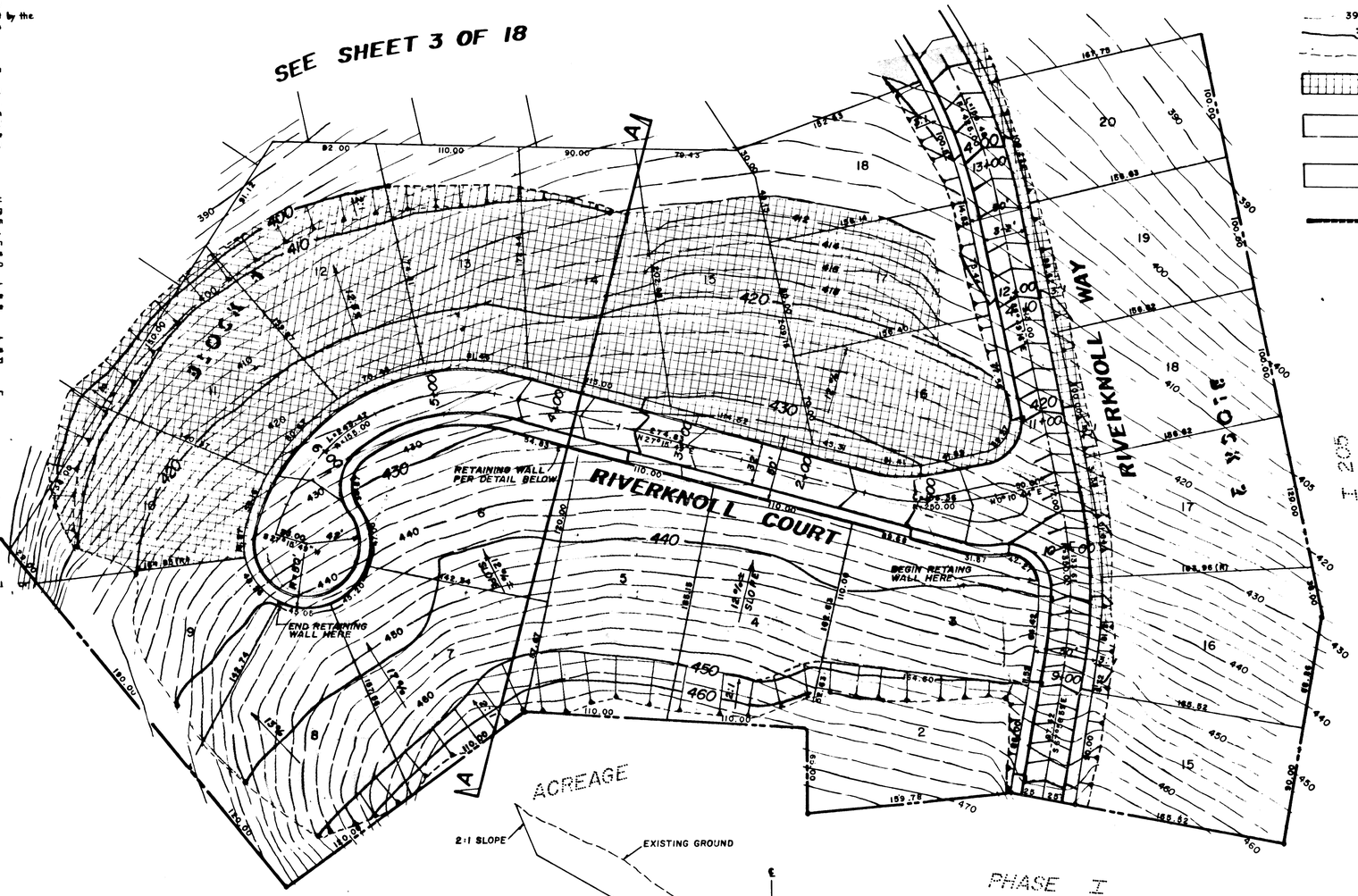
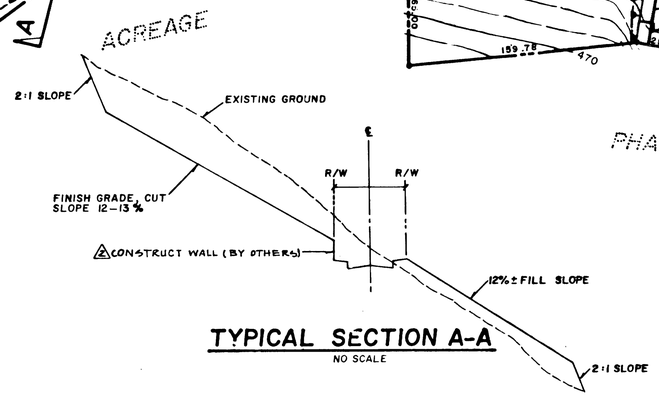
LEGEND

- 390 — EXISTING CONTOUR
- 390 — FINISH CONTOUR
- TOP OF TOE OF SLOPE
- AREA OF STRUCTURAL FILL
- AREA OF CUT
- AREA OF UNDISTURBED NATURAL CONDITION
- CONSTRUCTION STAGE LINE





TYPICAL SECTION A-A

NO SCALE

APPROVED NOV. 1986

DESIGNED: E.M.N. D.W.M.	SCALE: 1" = 50'	PHASE II	SITE / GRADING PLAN
CHECKED: B.S.S., D.W.M.	FILE NO.: 86-159	BARRINGTON HEIGHTS	SHEET 2 OF 18
DRAWN: E.M.N. M.J.B.	REVISED: STAGE 2	WEST LINN, OREGON	
DATE: SEPT, 1986	AS BUILT 3/9/87		

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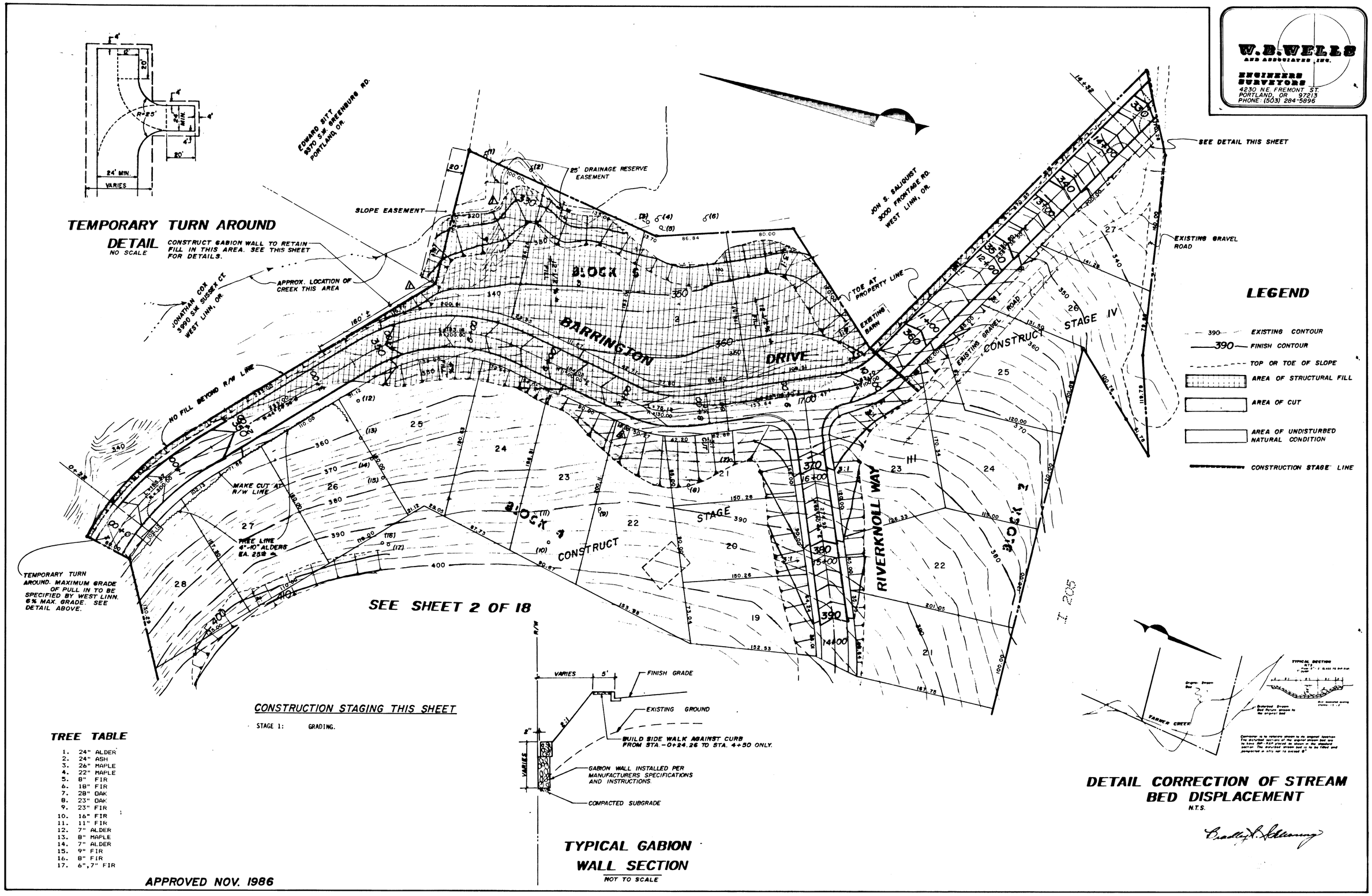


CONSTRUCTION STAGING THIS SHEET

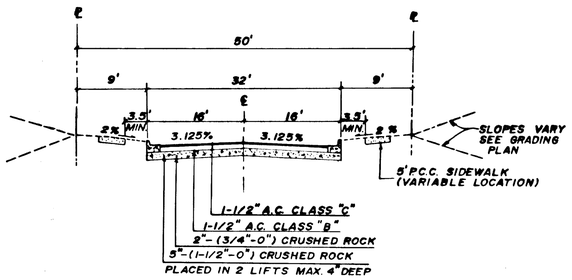
STAGE 1: GRADING.

TREE TABLE

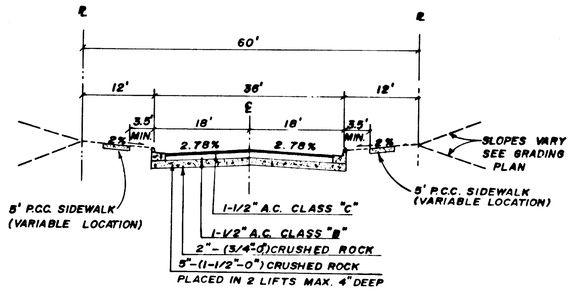
1. 24" ALDER
2. 24" ASH
3. 24" MAPLE
4. 22" MAPLE
5. 8" FIR
6. 18" FIR
7. 28" OAK
8. 23" OAK
9. 23" FIR
10. 16" FIR
11. 11" FIR
12. 7" ALDER
13. 8" MAPLE
14. 7" ALDER
15. 9" FIR
16. 8" FIR
17. 6",7" FIR

APPROVED NOV. 1986

DESIGNED: E.M.N. D.W.M.	SCALE: 1" = 50'	PHASE II	SITE / GRADING PLAN
CHECKED: B.S.S., D.W.M.	FILE NO.: 86-159	BARRINGTON HEIGHTS	SHEET 3 OF 18
DRAWN: M.J.B. E.M.N.	REVISED: 10/20/86 STAGE 2	WEST LINN, OREGON	
DATE: SEPT. 1986	AS BUILT 12/22/86		



RIVERKNOLL WAY & RIVERKNOLL CT.

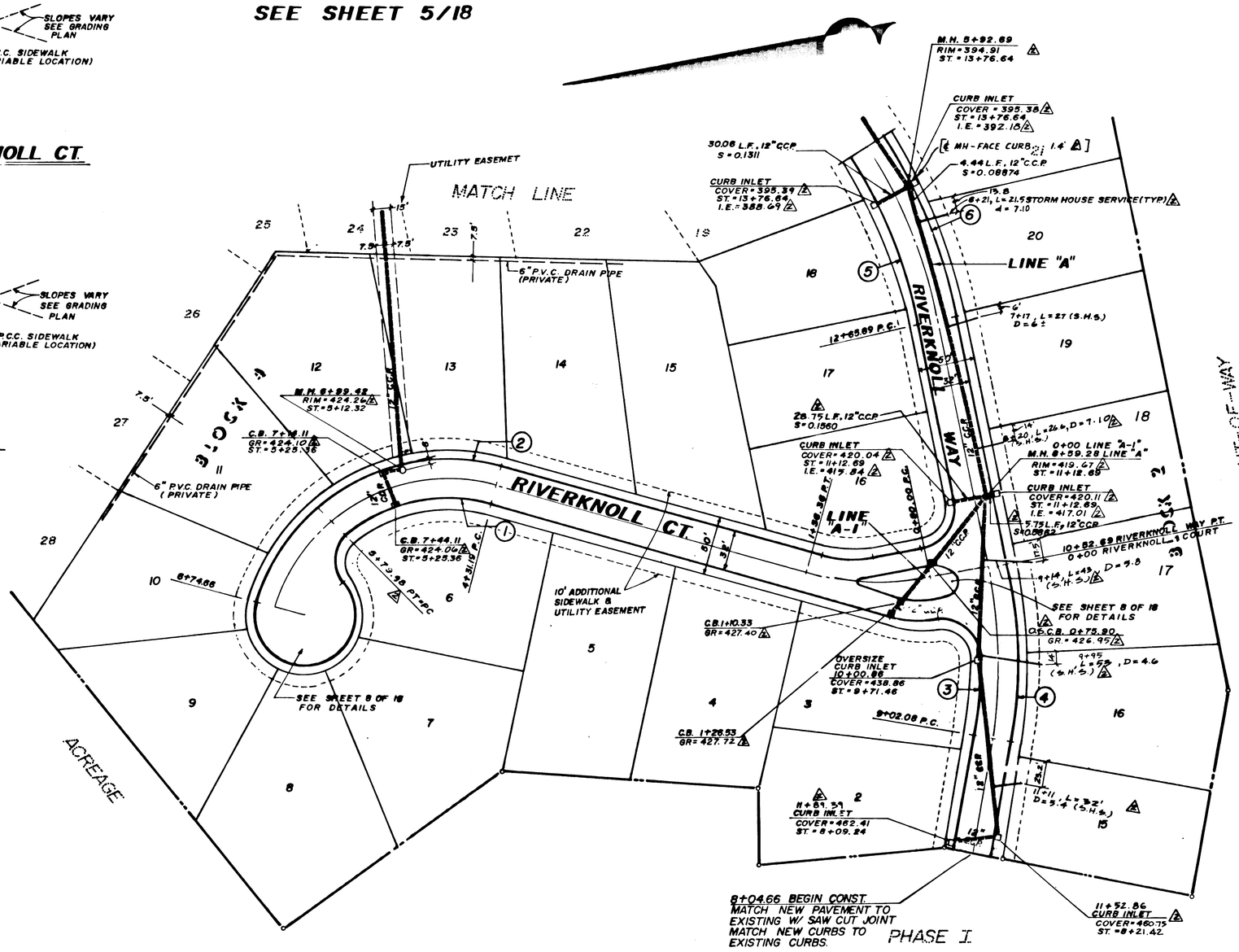


BARRINGTON DRIVE

TYPICAL STRUCTURE SECTIONS

NOT TO SCALE

SEE SHEET 5/18



1. Δ = 54° 46' 15" R = 139.00 L = 132.87
2. Δ = 54° 46' 15" R = 171.00 L = 163.46
3. Δ = 11° 21' 25" R = 334.00 L = 66.20
4. Δ = 21° 52' 17" R = 366.00 L = 139.71
5. Δ = 21° 30' 00" R = 409.00 L = 153.48
6. Δ = 21° 30' 00" R = 441.00 L = 165.48

NOTE: WHENEVER THE SYMBOL △ APPEARS IT SHOWS THAT THE DESIGN DATA HAS BEEN REPLACED BY "AS BUILT" DATA.

CONSTRUCTION STAGE INDEX

ALL IMPROVEMENTS ON THIS SHEET TO BE COMPLETED IN STAGE 2.

REGISTERED PROFESSIONAL ENGINEER OREGON JULY 20, 1983 BRADLEY S. SCHLEIMING

APPROVED NOV. 1986

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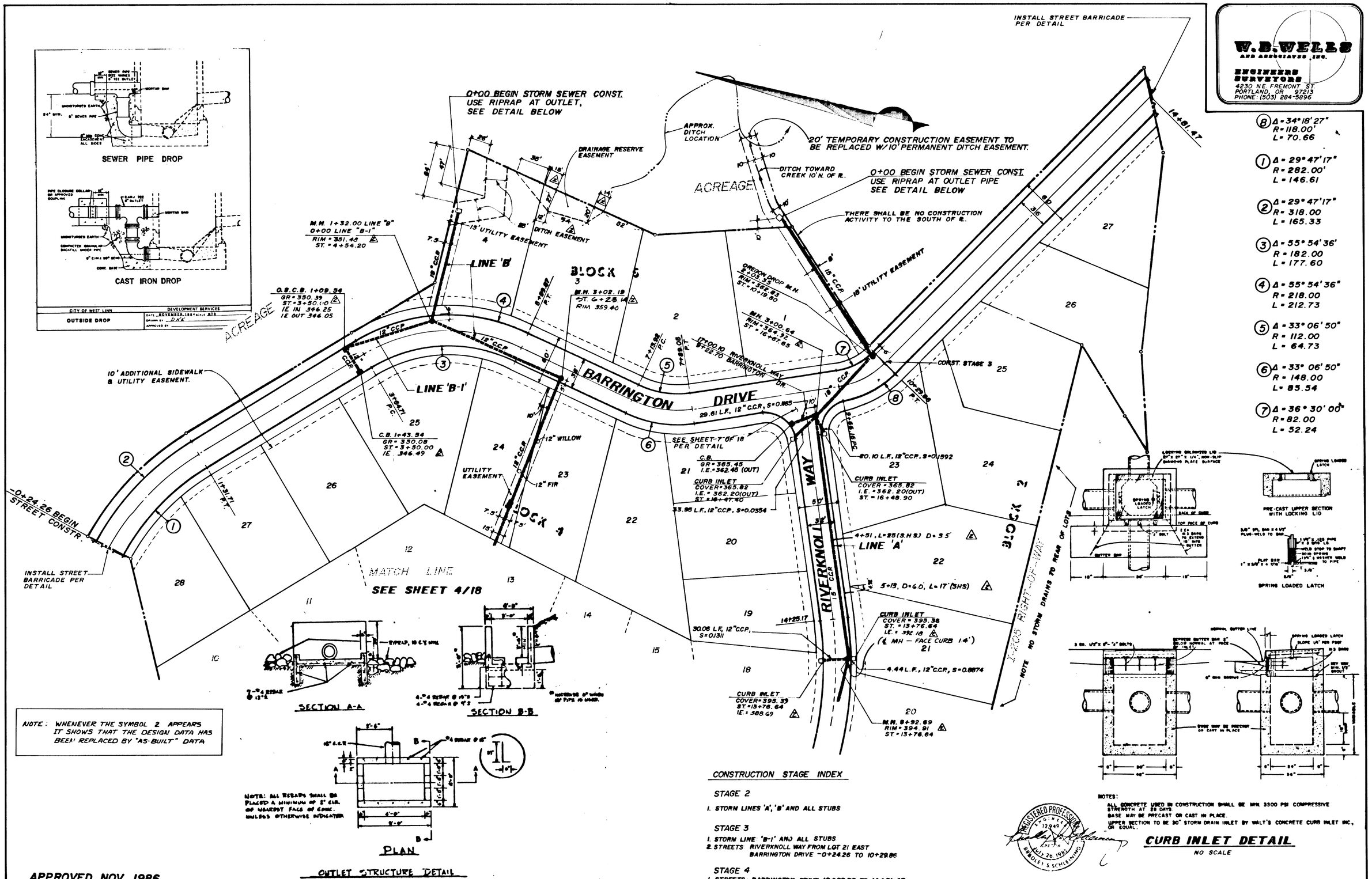
DESIGNED:	E.M.N., B.S.S.	SCALE:	1" = 50'
CHECKED:	B.S.S., D.W.M.	FILE NO.:	86-158
DRAWN:	M.J.B., E.M.N.	REVISED:	STAGE 2
DATE:	SEPT., 1986	AS BUILT	3/10/87 △

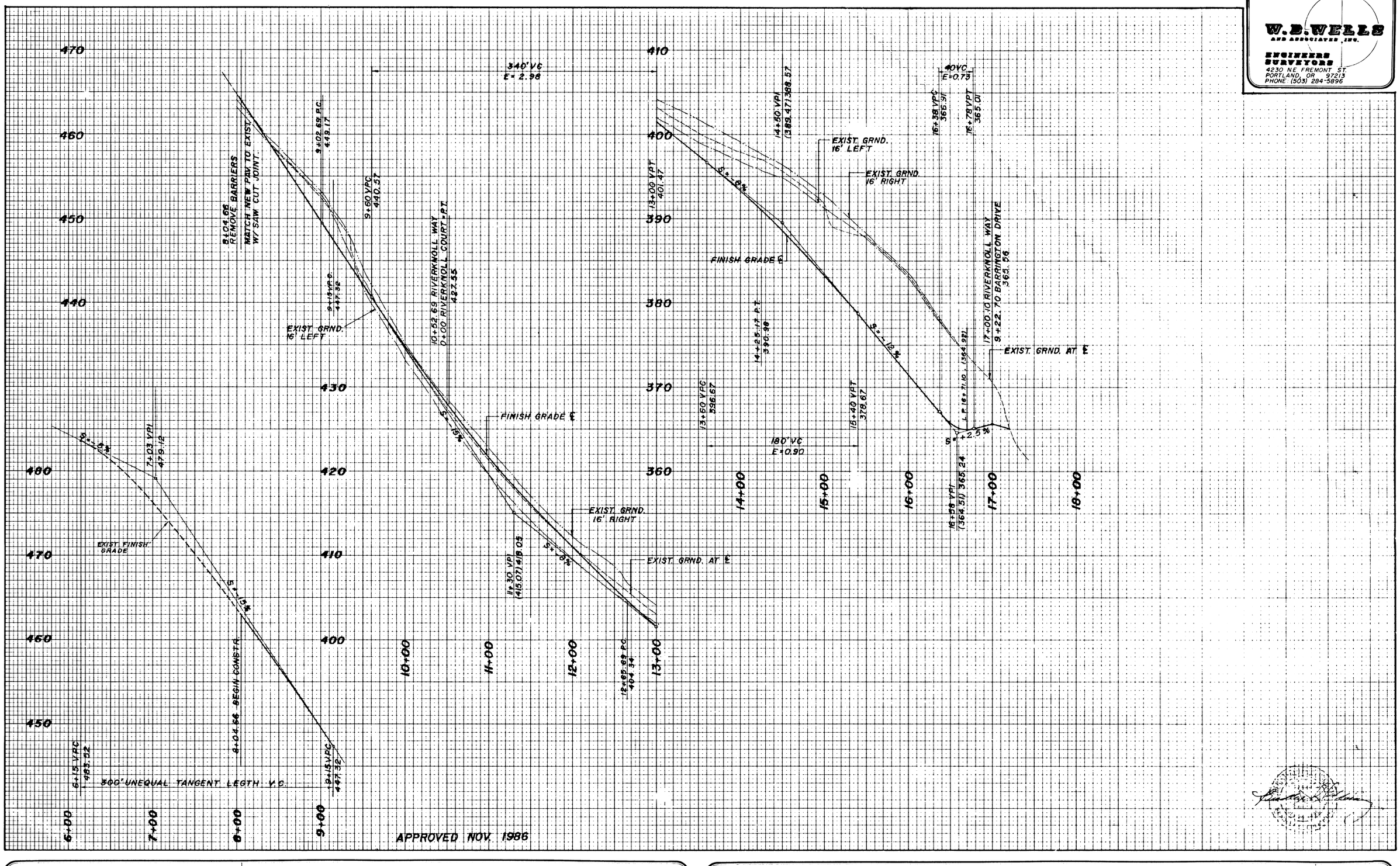
PHASE II
BARRINGTON HEIGHTS
WEST LINN, OREGON

STREET & STORM SEWER PLAN

SHEET 4 OF 18



DESIGNED: EMN, BSS	SCALE: 1" = 50'	PHASE II	SHEET 5 OF 18
CHECKED: B.S.S., D.W.M.	FILE NO: 86-158	BARRINGTON HEIGHTS	STREET & STORM SEWER PLAN
DRAWN: M.J.B., E.M.N.	REVISED: STAGE 2	WEST LINN, OREGON	
DATE: SEPT., 1986	AS BUILT 12/29/86		



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4230 N.E. FREMONT ST.
PORTLAND, OR 97213
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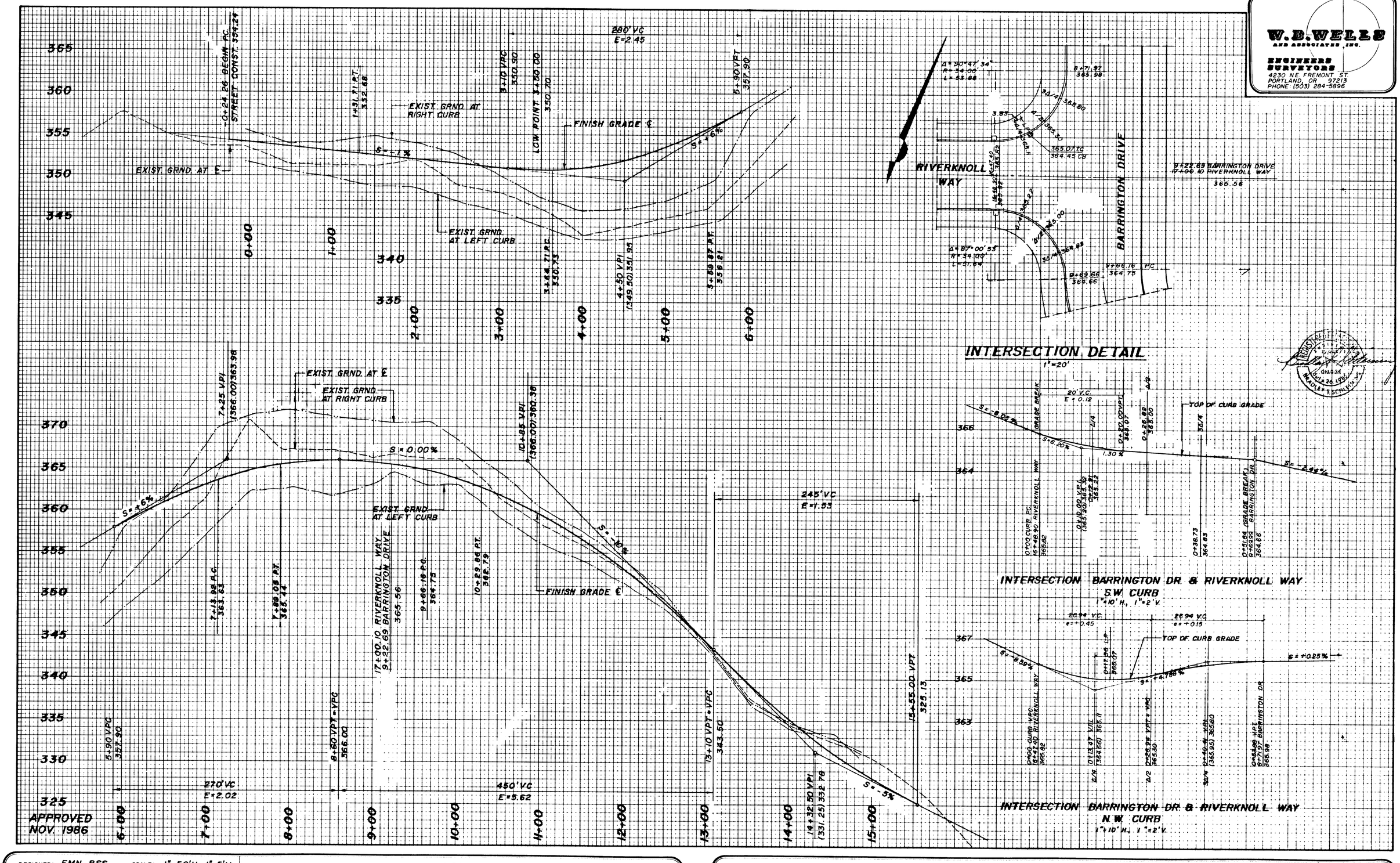
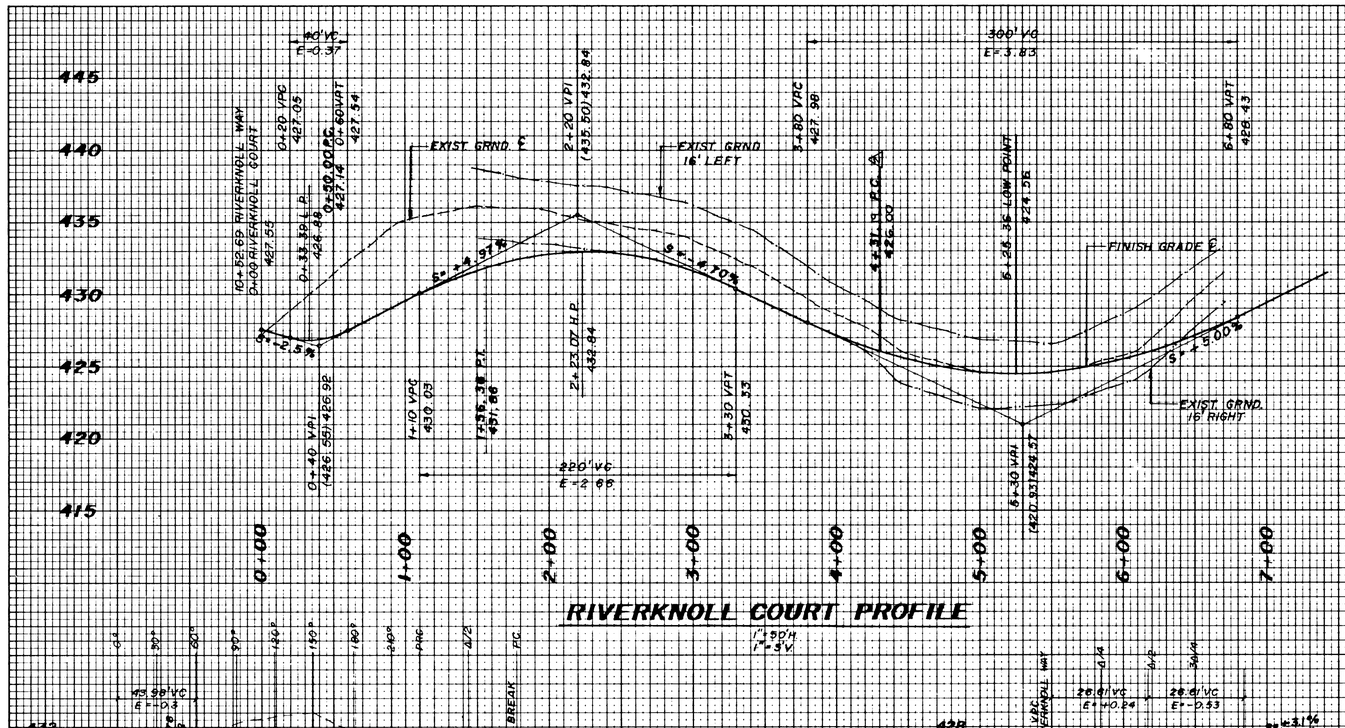
DESIGNED: BSS	SCALE: 1"=50', 1"=5'	PHASE II	RIVERKNOLL WAY
CHECKED: BSS, DWM	FILE NO. 86-158	BARRINGTON HEIGHTS	PROFILE
DRAWN: EMN	REVISED:	WEST LINN, OREGON	SHEET 6 OF 18
DATE: SEP., 1986			

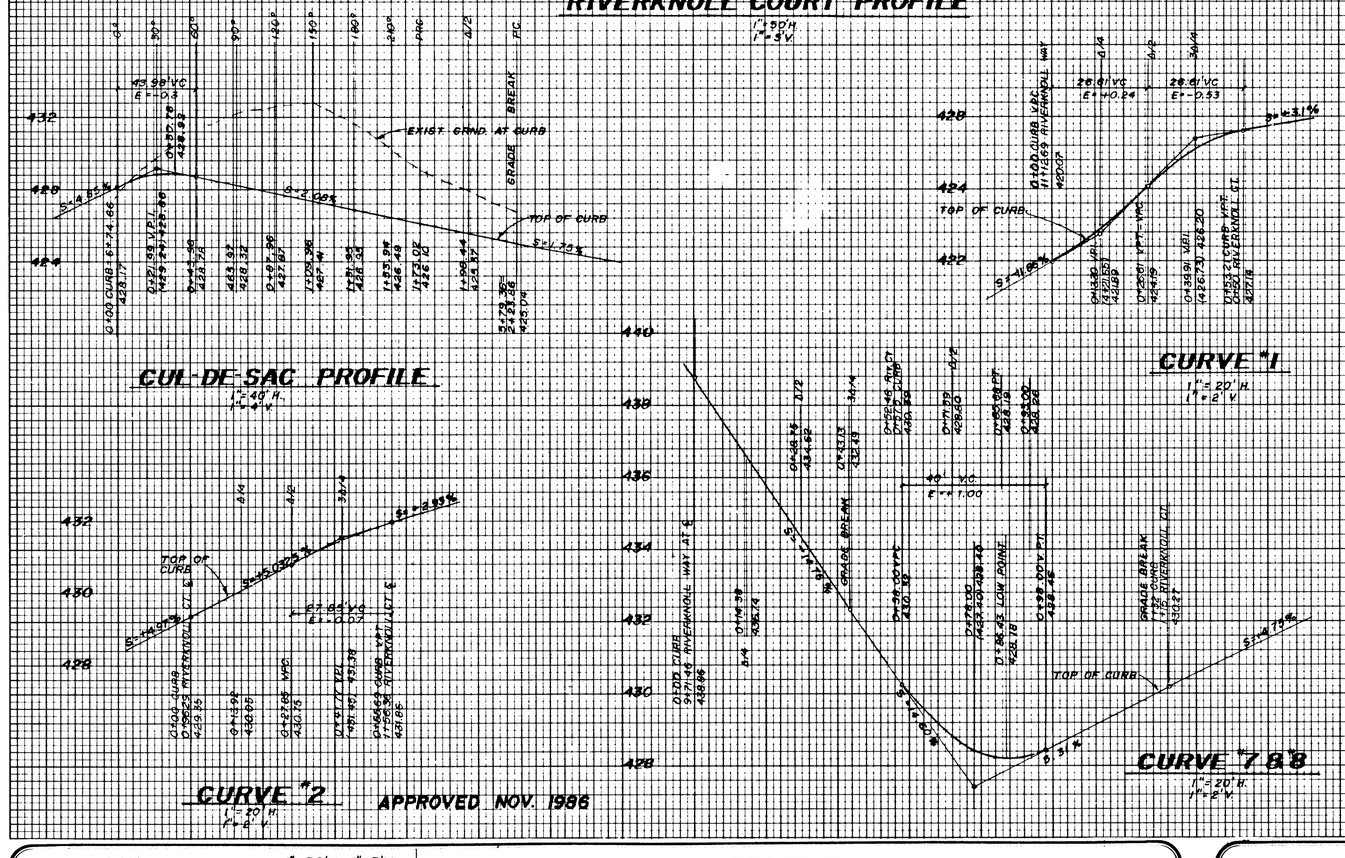


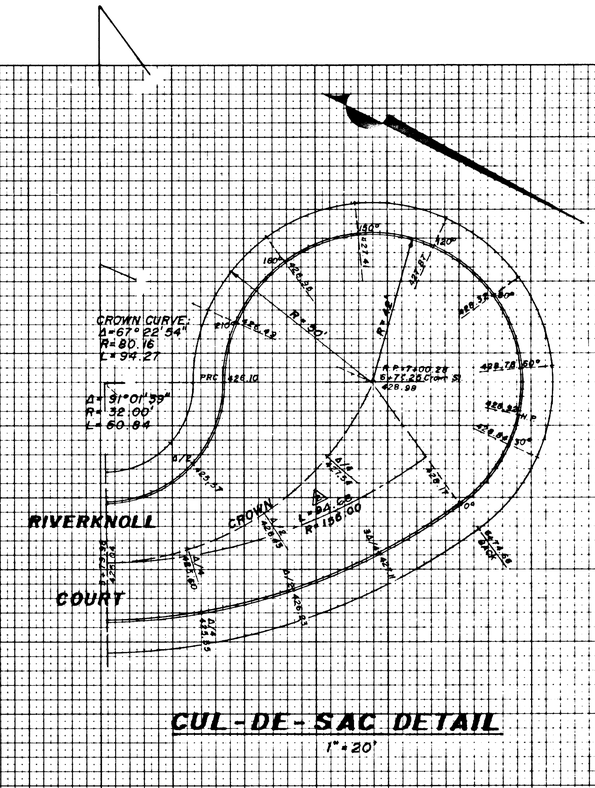
DESIGNED: EMN, BSS	SCALE: 1"=50'H, 1"=5'V.	PHASE II	BARRINGTON HEIGHTS
CHECKED: BSS, DWM	FILE NO.: 86-158		WEST LINN, OREGON
DRAWN: EMN	REVISED:		
DATE: SEP. 1986			

BARRINGTON DRIVE
PROFILES & INTERSECTION DETAILS

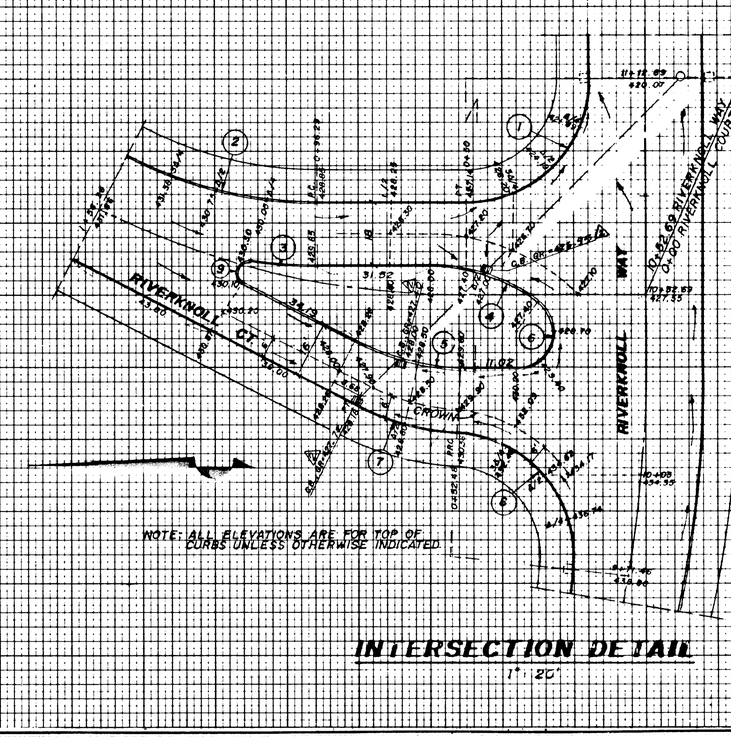
SHEET 7 OF 18







CUL-DE-SAC DETAIL
1"=20'



INTERSECTION DETAIL
1"=20'

CURB CURVES:

1. Δ=90°00'00" R=34.00' L=53.41
2. Δ=27°08'05" R=117.80 L=55.68
3. Δ=8°55'58" R=117.56 L=18.33
4. Δ=36°52'12" R=50.00' L=32.18
5. Δ=27°05'05" R=75.00 L=35.45
6. Δ=143°07'48" R=10.00' L=24.98'
7. Δ=23°27'59" R=68.82 L=28.18
8. Δ=96°53'47" R=34.00 L=57.50
9. Δ=161°50'53" R=3.00' L=8.47

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DESIGNED: E.M.N.	SCALE: 1"=50'H., 1"=5'V.	PHASE II	RIVERKNOLL COURT PROFILES AND DETAILS
CHECKED: B.S.S., DWM	FILE NO.: 86-158	BARRINGTON HEIGHTS	
DRAWN: E.M.N., M.J.B.	REVISED:	WEST LINN, OREGON	
DATE: SEP., 1986	AS BUILT STAGE 2 12/23/86		SHEET 8 OF 18

W.B. WELLS
AND ASSOCIATES, INC.
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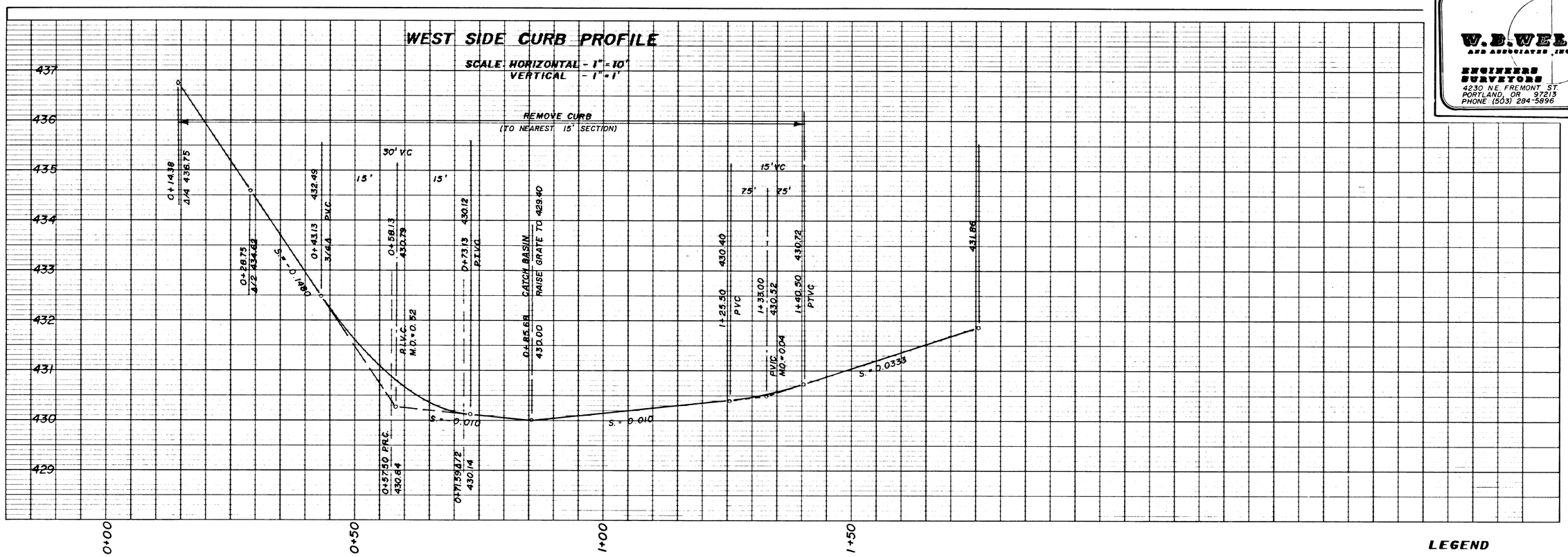
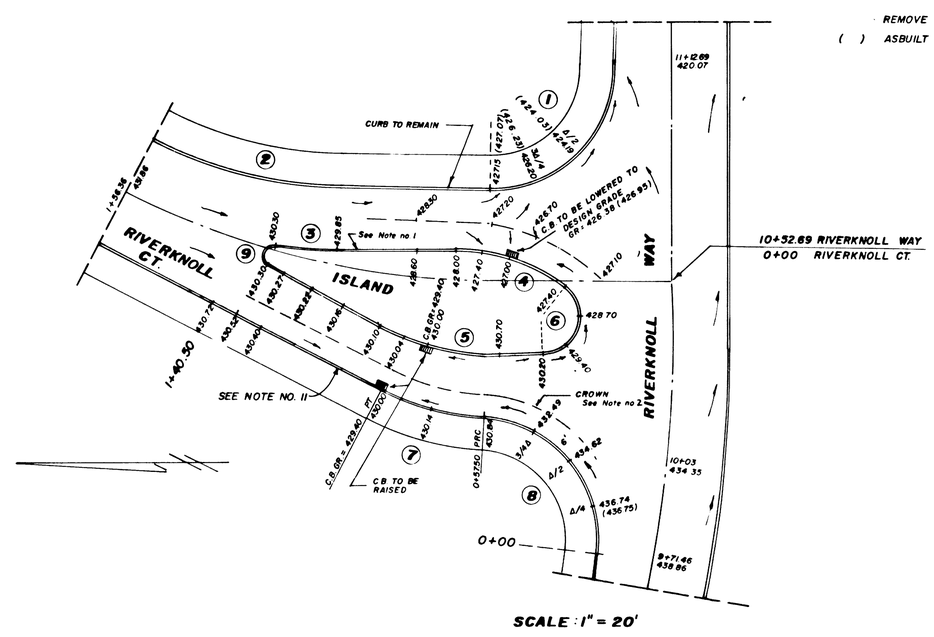


CONSTRUCTION AND GENERAL NOTES

1. ALL OF THE ISLAND CURBING IS TO BE REMOVED.
2. THE CROWN IN ROAD ON THE WEST SIDE OF THE ISLAND IS TO BE SIX (6) FEET FROM THE CURB AND IS TO BE 0.20 FEET HIGHER THAN THE GUTTER ELEVATION.
3. PAVEMENT IS TO BE REMOVED AS SHOWN.
4. THE CATCH BASIN ON THE EAST SIDE OF THE ISLAND IS TO BE ADJUSTED TO MEET DESIGN GRATE ELEVATION. SEE SHEET 8.
5. THE CATCH BASIN GRATES ON THE WEST SIDE OF THE ISLAND ARE TO BE RAISED FROM THEIR CURRENT ELEVATIONS TO THE NEW DESIGN ELEVATIONS. THE CONTRACTOR IS TO RAISE THESE GRATES IN A MANNER APPROVED BY THE CITY OF WEST LINN.
6. SEE SHEET 8 OF 18 OF THE APPROVED PLANS FOR THE CURVE DATA.
7. STREET SECTION TO BE THE SAME AS SHOWN IN THE APPROVED PLANS.
8. ALL ELEVATIONS SHOWN ARE "TOP OF CURB" UNLESS OTHERWISE NOTED.
9. NO ASBUILT ELEVATIONS ARE SHOWN ON THE PORTIONS OF THE CURB TO BE REMOVED. NEW CURB IS TO BE BUILT TO THE DESIGN GRADES AS SHOWN.
10. FOR ISLAND DIMENSIONS SEE SHEET 8 OF 18 OF THE APPROVED PLANS.
11. CURBING ON THE WEST SIDE OF THE INTERSECTION IS TO BE REMOVED FROM STATION 0+14.38 TO STATION 1+40.50. CUT TO BE AT THE NEAREST JOINT OUTSIDE OF THOSE LIMITS.

LEGEND

REMOVE A.C.
( ) ASBUILT



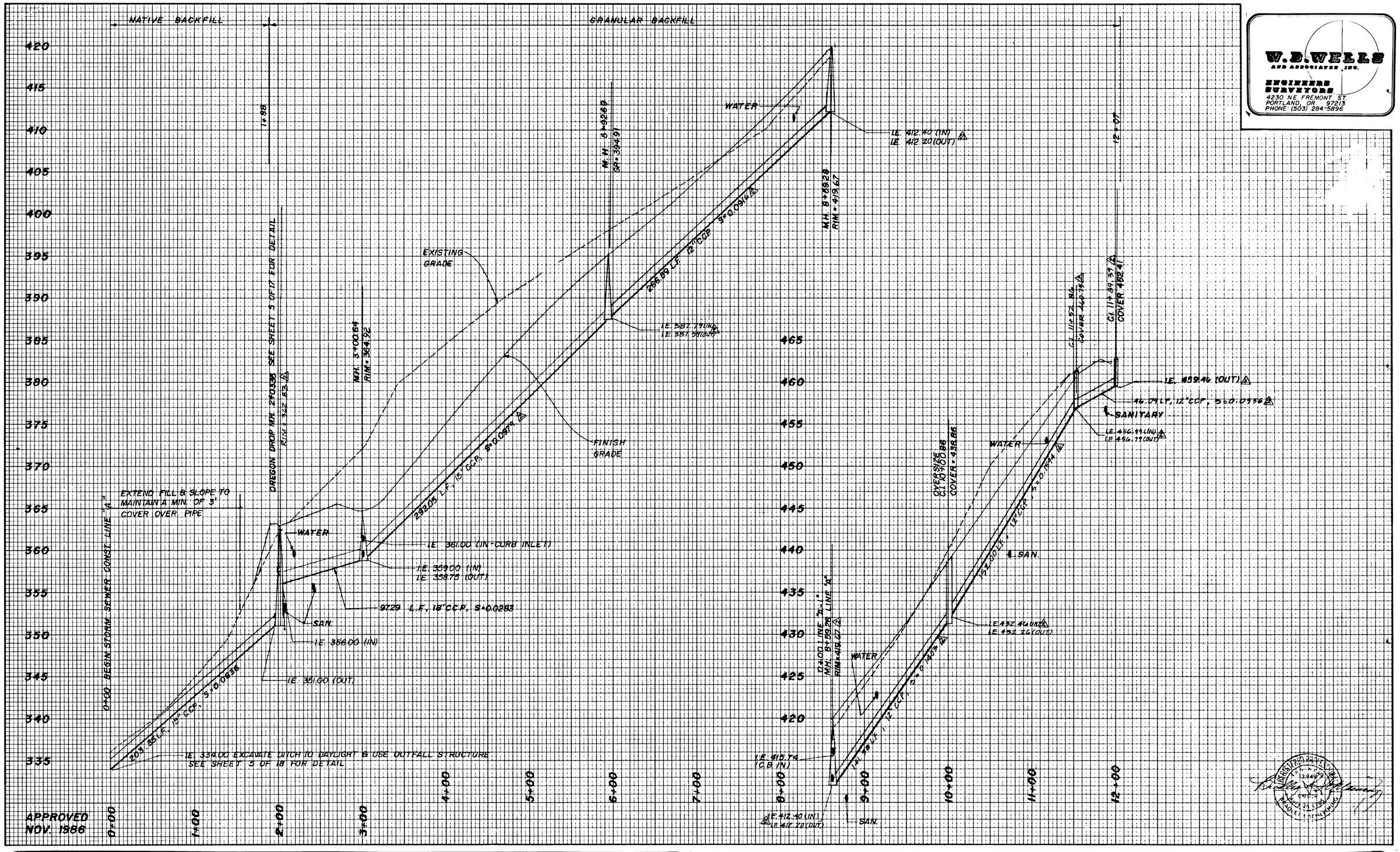
SCALE: 1" = 20'

DESIGNED	B.S.S.	SCALE:	
CHECKED		FILE NO:	86-158
DRAWN:	B.S.S.	REVISED:	3/27/87
DATE:	3/27/87		

PHASE II
BARRINGTON HEIGHTS
WEST LINN, OREGON

ISLAND AND WEST SIDE CURB REDESIGN

SHEET 8A OF 18



W. D. WELLS AND ASSOCIATES, INC.
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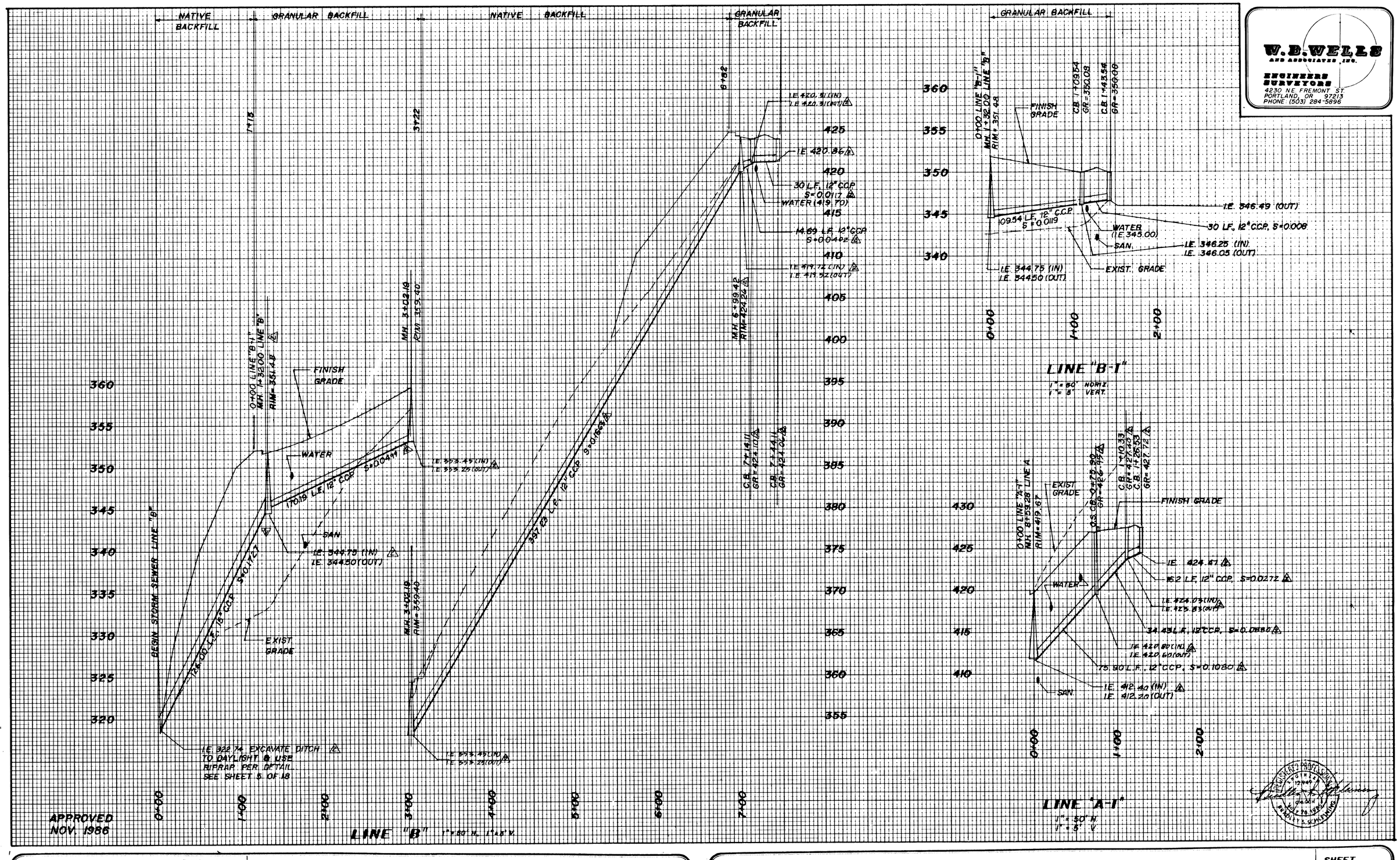
PHONE: (503) 284-5896

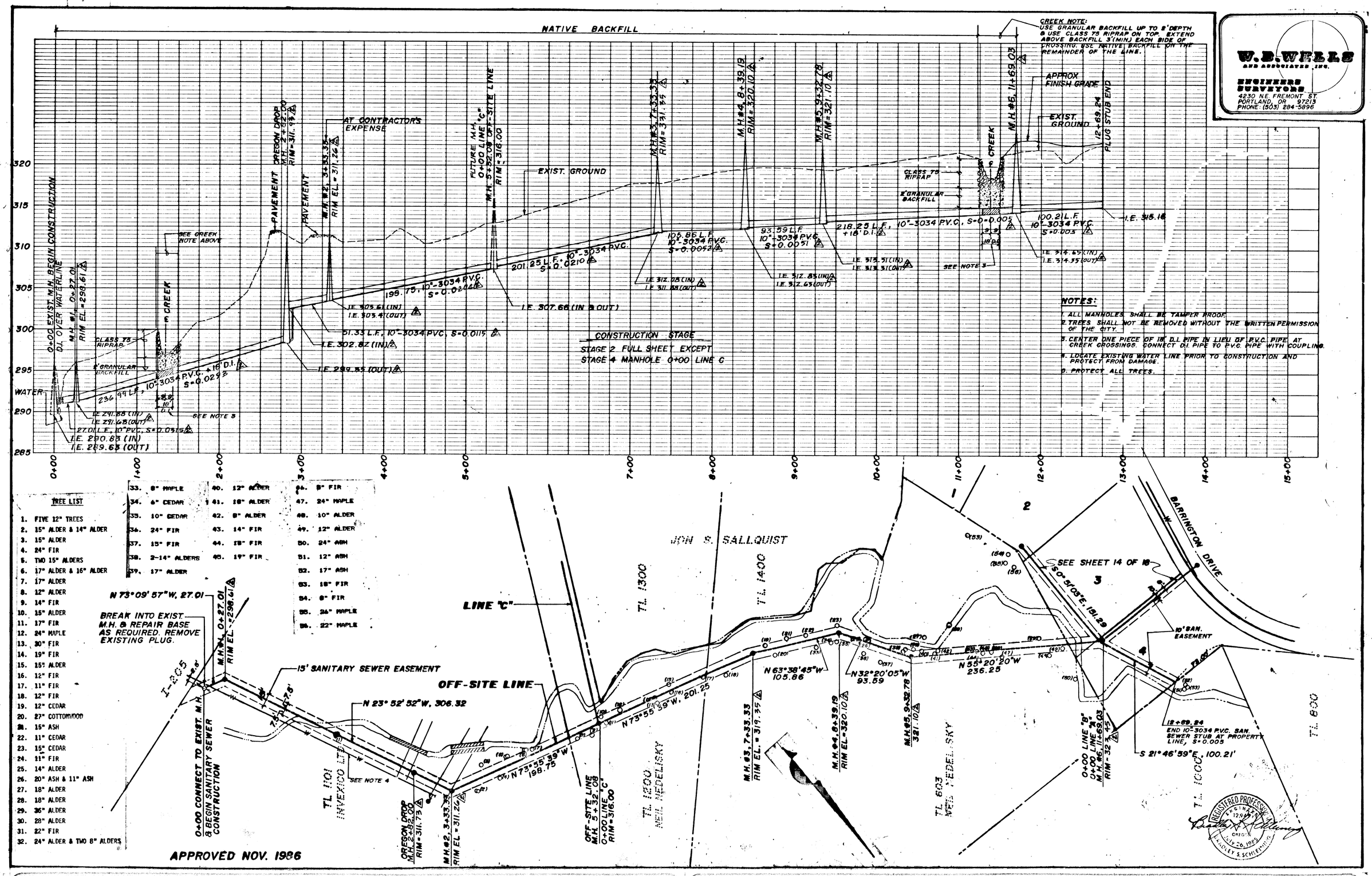
APPROVED NOV. 1986

DESIGNED: E.M.N., B.S.S.	SCALE: 1"=50'H., 1"=5'V.	PHASE II	STORM SEWER PROFILE LINE "A"
CHECKED: B.S.S., D.W.M.	FILE NO.: 86-158	BARRINGTON HEIGHTS	SHEET 9 OF 18
DRAWN: M.J.B.	REVISED: STAGE 2	WEST LINN, OREGON	
DATE: SEPT. 1986	"AS BUILT" 2/12/87		

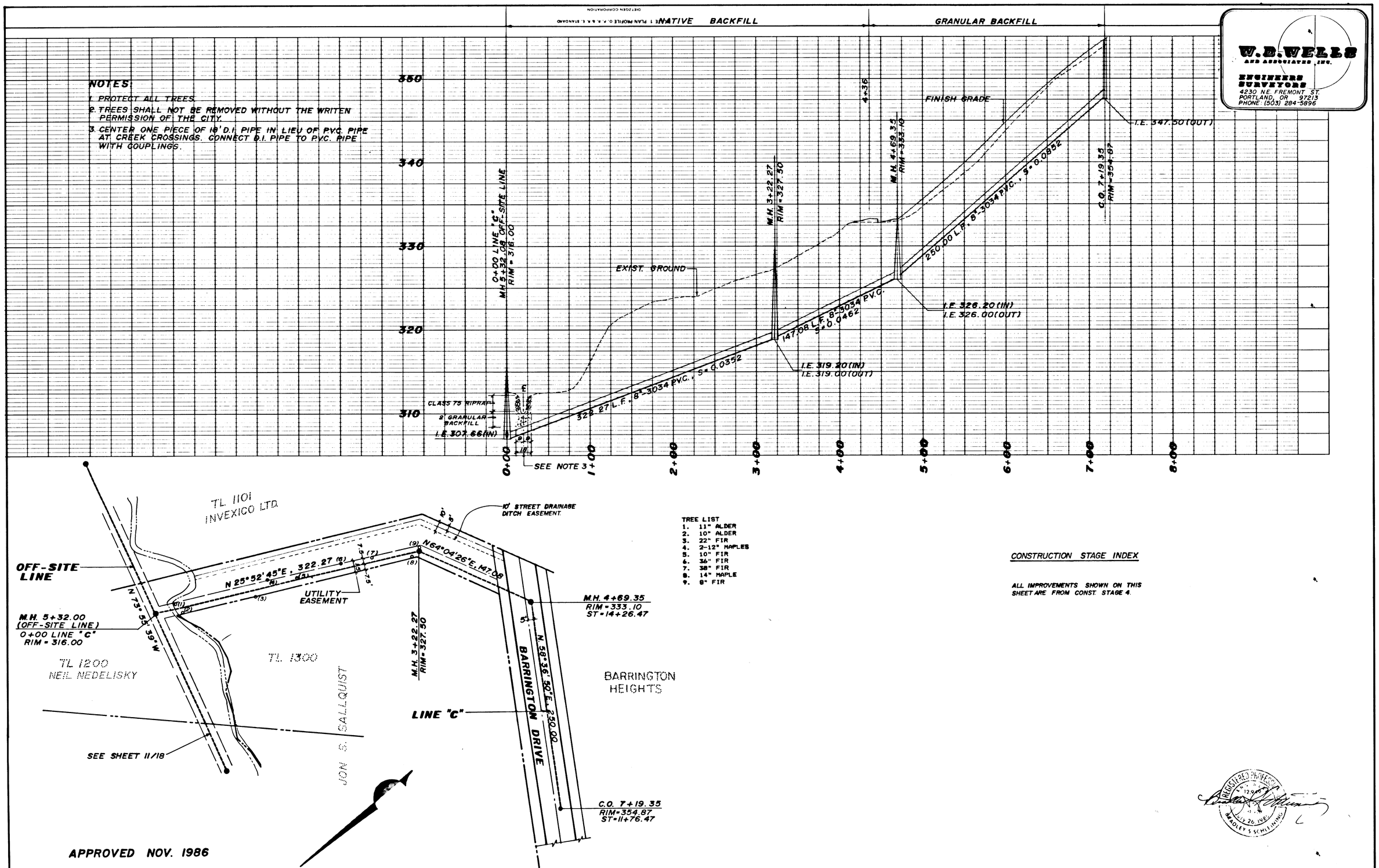


W. B. WELLS AND ASSOCIATES, INC.
ENGINEERS SURVEYORS
4230 N.E. FREMONT ST.
PORTLAND, OR 97213
PHONE (503) 284-5896

DESIGNED: E.M.N., B.S.S.	SCALE: 1"=50'H, 1"=5'V.	PHASE II	SHEET 10 OF 18
CHECKED: B.S.S., D.W.M.	FILE NO: 86-158	**BARRINGTON HEIGHTS**	STORM SEWER PROFILES LINES "B", "B-1" AND "A-1"
DRAWN: M.J.B., E.M.N.	REVISED: ~~STAGE 2~~	WEST LINN, OREGON	
DATE: SEPT. 1986	"AS BUILT" 2/12/87		



DESIGNED: B.S.S.	SCALE: 1"=50'H., 1"=5'V.	PHASE III	OFF-SITE SANITARY SEWER PLAN AND PROFILE
CHECKED: B.S.S., D.W.M.	FILE NO: 86-158	BARRINGTON HEIGHTS	
DRAWN: E.M.H.	REVISED	WEST LINK, OREGON	
DATE: SEPT., 1986	AS-BUILT 9/12/87		SHEET 11 OF 18



TREE LIST
1. 11" ALDER
2. 10" ALDER
3. 22" FIR
4. 2-12" MAPLES
5. 10" FIR
6. 36" FIR
7. 38" FIR
8. 14" MAPLE
9. 8" FIR

CONSTRUCTION STAGE INDEX

ALL IMPROVEMENTS SHOWN ON THIS SHEET ARE FROM CONST. STAGE 4.

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4230 N.E. FREMONT ST.
PORTLAND, OR 97213
PHONE: (503) 284-5896

DESIGNED: BSS, EMN	SCALE: 1"=50' HOR., 1"=5' VER.	PHASE II	SANITARY SEWER
CHECKED: BSS, DWM	FILE NO.: 86-158	BARRINGTON HEIGHTS	PLAN & PROFILE, LINE "C"
DRAWN: EMN	REVISED:	WEST LINN, OREGON	SHEET 12 OF 18
DATE: NOV., 1986			

TEMPORARY LINE NOTES

1. INSTALL TEMPORARY LINE OF 4" CLASS 160 P.V.C. PIPE AS SHOWN ON PLAN OVERLAND BETWEEN 4" VALVES. COVER EXCAVATIONS AT CONNECTION POINTS.
2. FLUSH 4" LINE AND INTRODUCE CHLORINE SOLUTION TO DISINFECT LINE. HOLD SOLUTION IN LINE 24 HOURS.
3. FLUSH 4" LINE AND TAKE SAMPLE FOR TESTING AFTER 24 HOURS.
4. UPON PASSING TEST CLOSE 10" VALVES AND PUT 4" LINE IN SERVICE.
5. PLACE THRUST BLOCKS OR RESTRAINTS TO HOLD 10" PIPE PRIOR TO REMOVING EXISTING 10" LINE. CONSTRUCT NEW 10" LINE. AFTER INSTALLATION FLUSH LINE. PRESSURE TEST AND DISINFECT NEW LINE. UPON PASSING ALL TESTS PLACE NEW LINE IN SERVICE.
6. REMOVE TEMPORARY LINE AFTER NEW LINE IS IN SERVICE.
7. EXISTING PUMPS WILL FUNCTION IN NORMAL FASHION.
8. TEMPORARY LINE JOINTS SHALL HAVE NO VISIBLE LEAKAGE.
9. ITEMS 1 TO 8 MUST TAKE PLACE CONCURRENTLY, WITHOUT INTERRUPTION AND WITHIN A TWO WEEK PERIOD TO AVOID A PENALTY.

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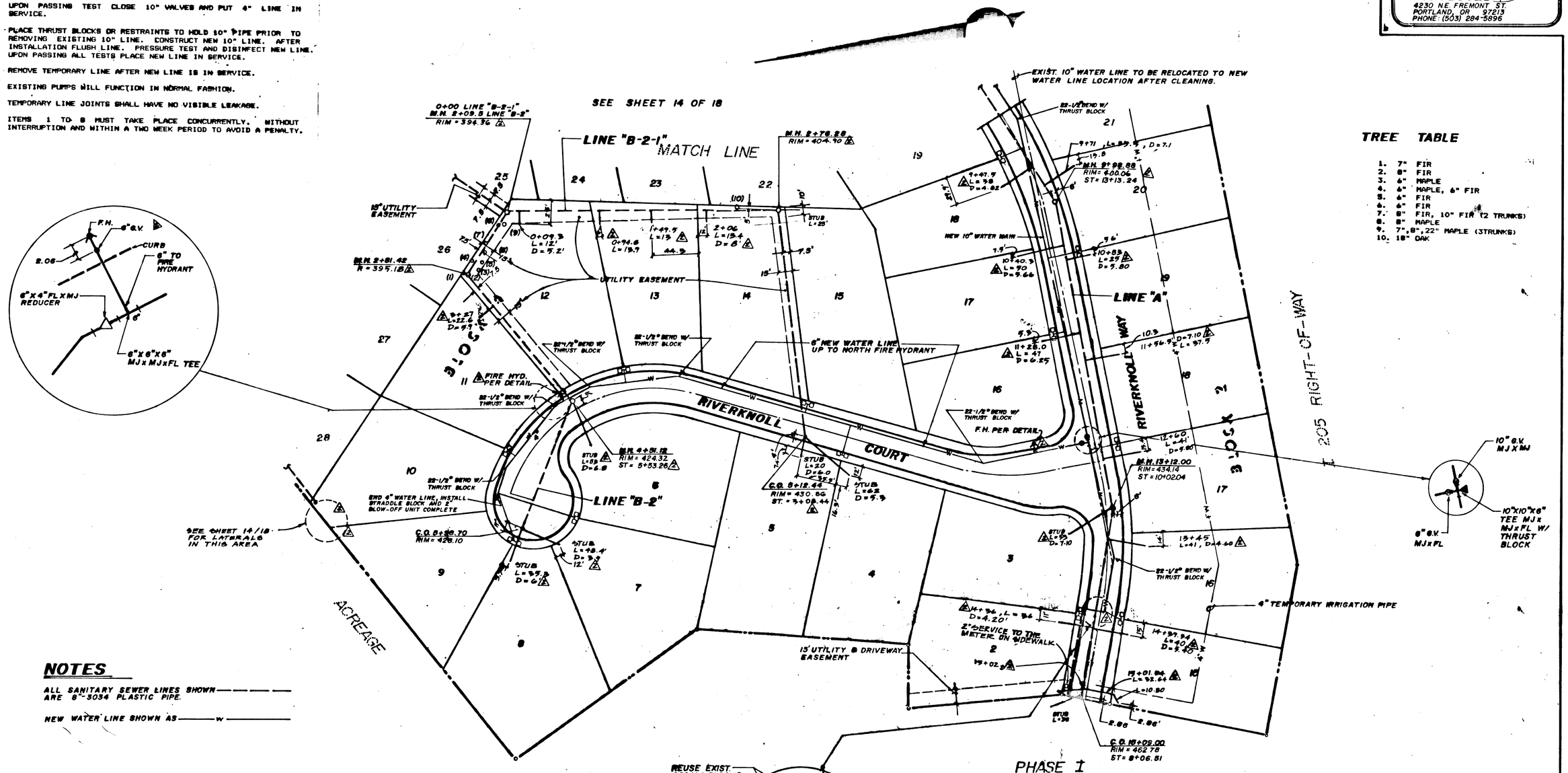


TREE TABLE

1. 7" FIR
2. 8" FIR
3. 6" MAPLE
4. 6" MAPLE, 6" FIR
5. 6" FIR
6. 6" FIR
7. 8" FIR, 10" FIR (2 TRUNKS)
8. 8" MAPLE
9. 7", 8", 22" MAPLE (3 TRUNKS)
10. 18" OAK

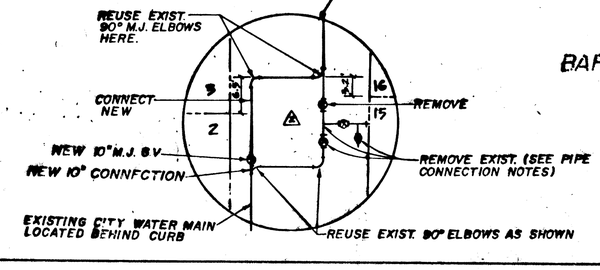
NOTES

ALL SANITARY SEWER LINES SHOWN ———— ARE 8"-3034 PLASTIC PIPE.

NEW WATER LINE SHOWN AS ——W——

CONSTRUCTION STAGE INDEX

ALL IMPROVEMENTS ON THIS SHEET TO BE COMPLETED IN STAGE 2.



PHASE I

BARRINGTON HEIGHTS

WATER PIPE CONNECTION NOTES

1) CONNECTION TO BE DONE IN ONE DAY.
2) SHUT DOWN - 2 HOURS MAXIMUM. (2 TEMPORARY SHUT DOWNS)
   1-CUT IN AT BACK OF VALVE
   2-TIE IN AT UPPER VALVE
3) USE ALL NEW PIPE AND FITTINGS.
4) ALL EXIST. FITTINGS SHALL BE DISINFECTED PRIOR TO RECONNECTION
5) MAINTAIN MINIMUM 30" COVER BETWEEN TOP OF SUBGRADE AND TOP OF WATER.

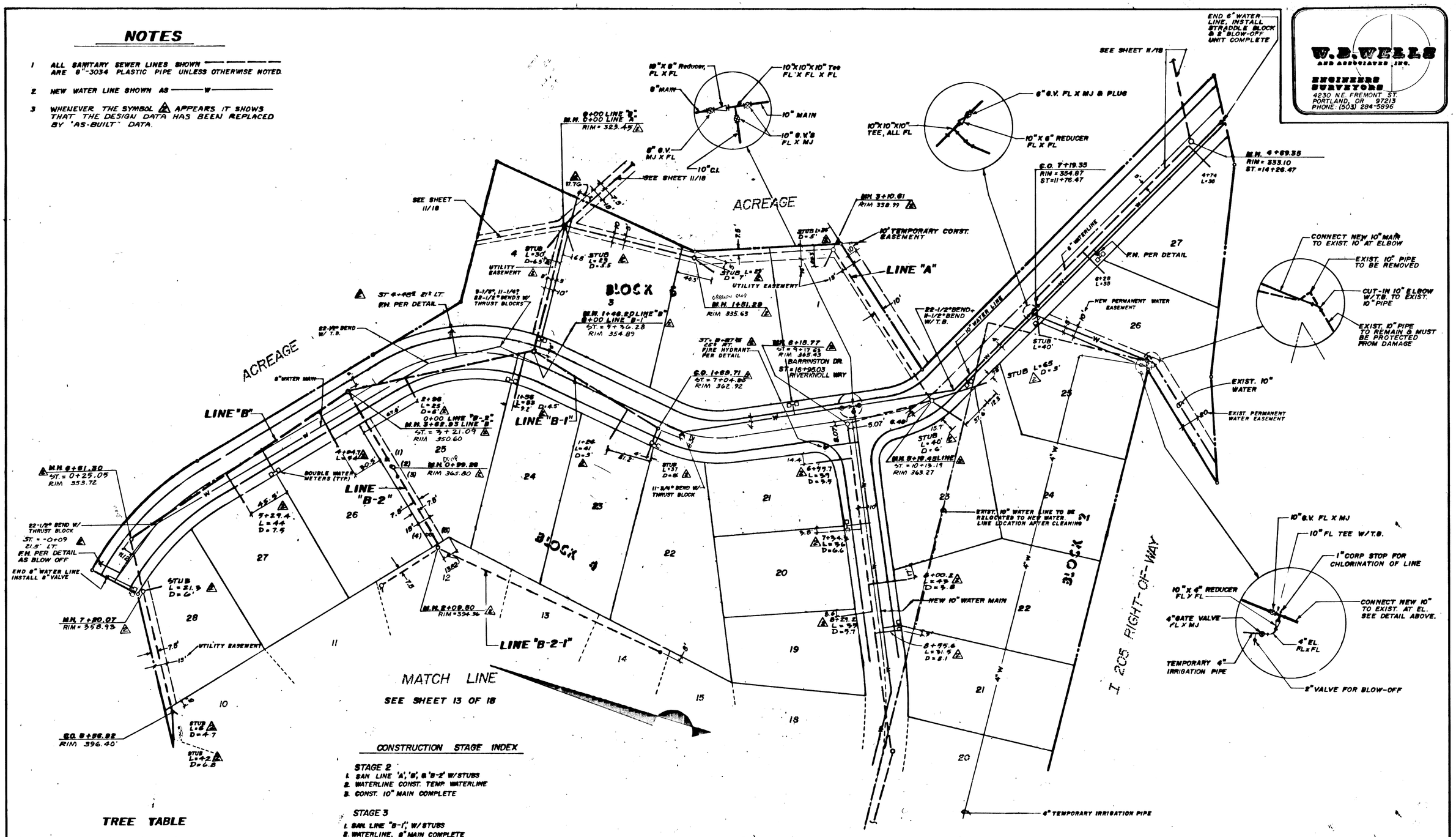
REGISTERED PROFESSIONAL ENGINEER 12949 OREGON BRADLEY S. SCHLEINING

APPROVED NOV. 1986

DESIGNED: E.M.N., B.S.S.	SCALE: 1" = 60'	PHASE II BARRINGTON HEIGHTS WEST LINN, OREGON	SANITARY SEWER & WATER PLAN
CHECKED: B.S.S., D.W.M.	FILE NO: 86-158		SHEET 13 OF 18
DRAWN: M.J.B., E.M.N.	REVISED: STAGE 2		
DATE: SEPT. 1986	AS BUILT 12/23/86		

NOTES

1. ALL SANITARY SEWER LINES SHOWN ARE 8"-3034 PLASTIC PIPE UNLESS OTHERWISE NOTED.
2. NEW WATER LINE SHOWN AS —W—
3. WHENEVER THE SYMBOL △ APPEARS IT SHOWS THAT THE DESIGN DATA HAS BEEN REPLACED BY 'AS-BUILT' DATA.



TREE TABLE

1. 10" FIR
2. 8" ALDER
3. 9" MAPLE
4. 12" FIR
5. 11" FIR

CONSTRUCTION STAGE INDEX

STAGE 2
1. SAN LINE 'A', 'B', & 'B-2' W/STUBS
2. WATERLINE CONST. TEMP. WATERLINE
3. CONST. 10" MAIN COMPLETE

STAGE 3
1. SAN. LINE "B-1" W/STUBS
2. WATERLINE, 8" MAIN COMPLETE

STAGE 4
1. SAN. LINE "C" W/STUBS
2. WATERLINE, 6" MAIN COMPLETE

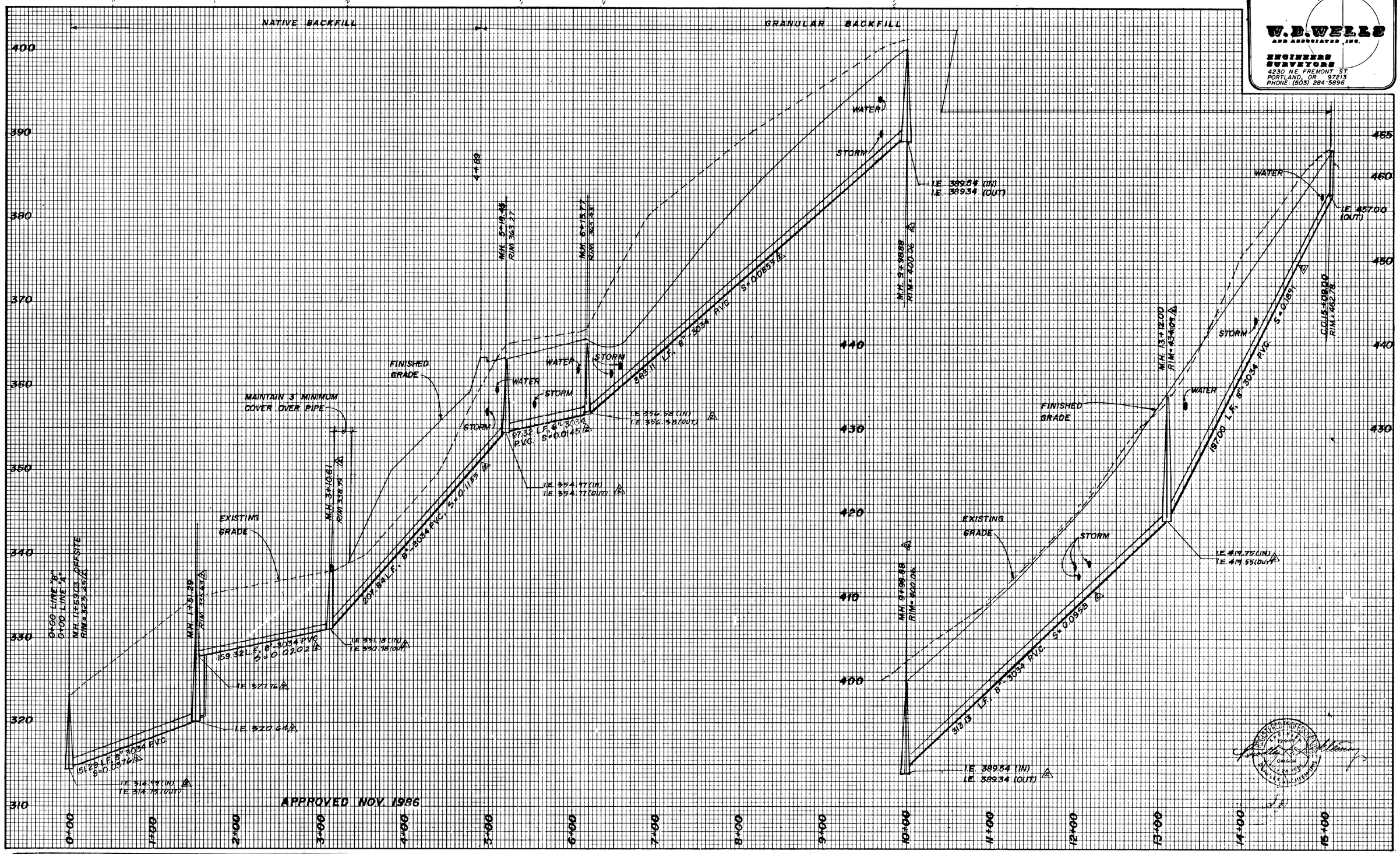
APPROVED NOV. 1986

DESIGNED:	E.M.N., B.S.S.	SCALE:	1"=80'
CHECKED:	B.S.S., D.W.M.	FILE NO.:	86-158
DRAWN:	M.J.B., E.M.N.	REVISED:	~~STAGE 2~~
DATE:	SEPT., 1986	AS BUILT	12/23/86 △

PHASE II
BARRINGTON HEIGHTS
WEST LINN, OREGON

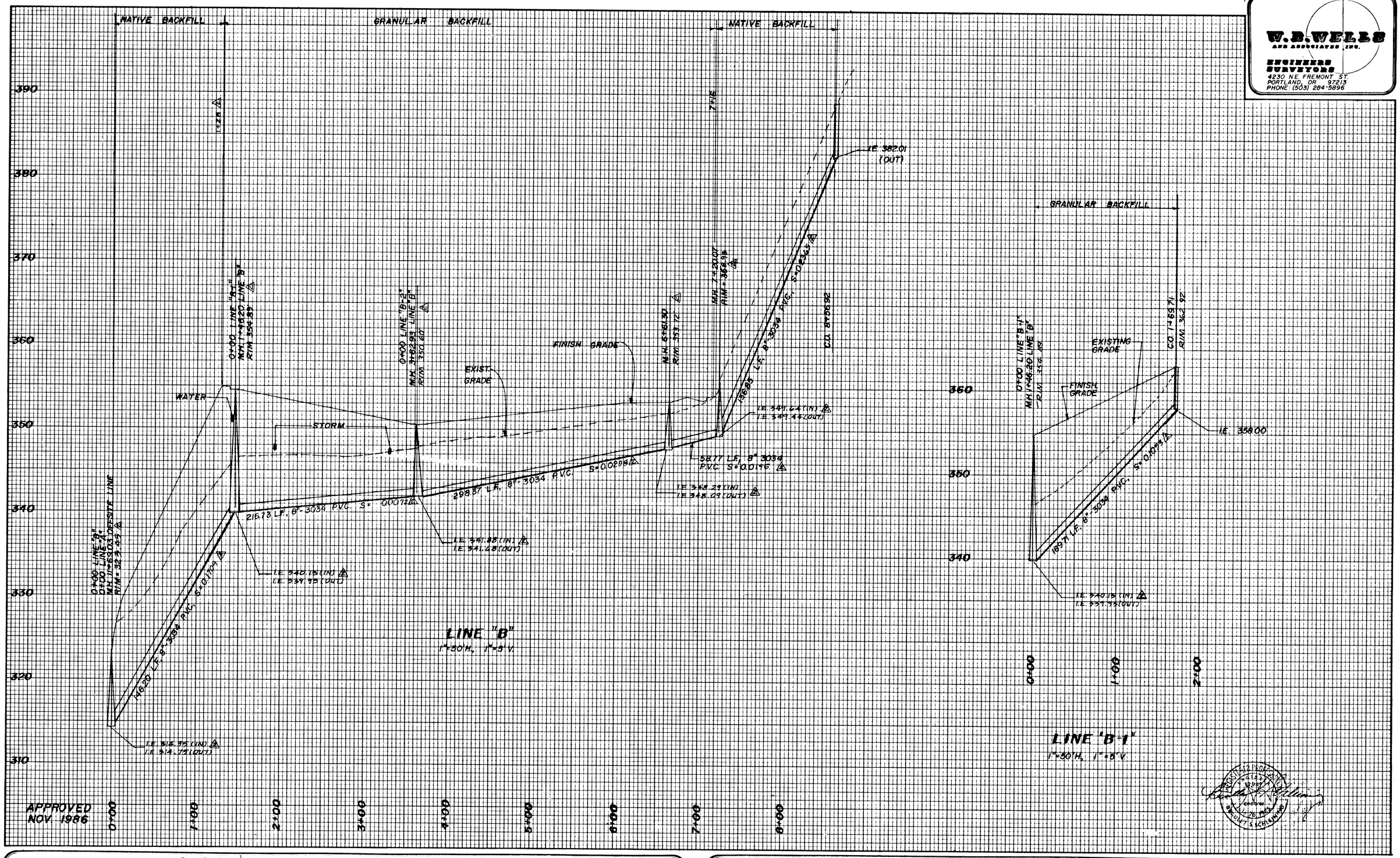
SANITARY SEWER & WATER PLAN

SHEET 14 OF 18



W. D. WELLS AND ASSOCIATES, INC.
ENGINEERS SURVEYORS
4230 N.E. FREMONT ST.
PORTLAND, OR 97213
PHONE: (503) 284-5896

DESIGNED: E.M.N., B.S.S.	SCALE: 1" = 50'	PHASE II	SANITARY SEWER PROFILE LINE "A"
CHECKED: B.S.S., D.W.M	FILE NO.: 86-158	BARRINGTON HEIGHTS	SHEET 15 OF 18
DRAWN: M.J.B.	REVISED: STAGE 2	WEST LINN, OREGON	
DATE: SEPT. 1986	AS BUILT 1/7/87		



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PORTLAND, OR 97213
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DESIGNED: E.M.N., B.S.S.	SCALE: 1" = 50'H, 1"=5'V.	PHASE II	SANITARY SEWER PROFILES
CHECKED: B.S.S., D.W.M.	FILE NO.: 86-158	BARRINGTON HEIGHTS	LINES "B" & "B-1"
DRAWN: M.J.B.	REVISED: ~~PHASE I~~	WEST LINN, OREGON	
DATE: SEPT. 1986	AS BUILT 2/12/87		SHEET 16 OF 18

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AND ASSOCIATES, INC.
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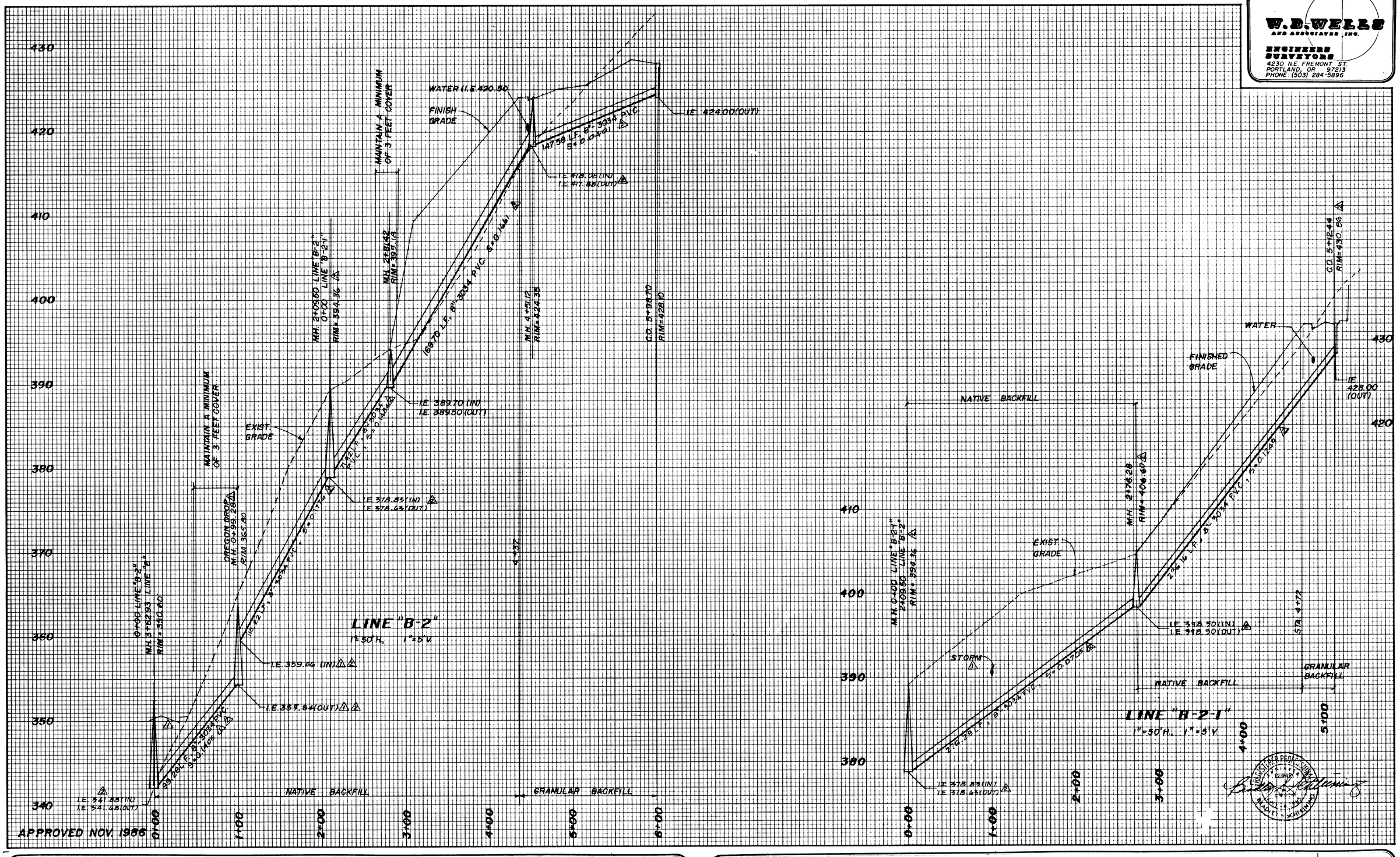
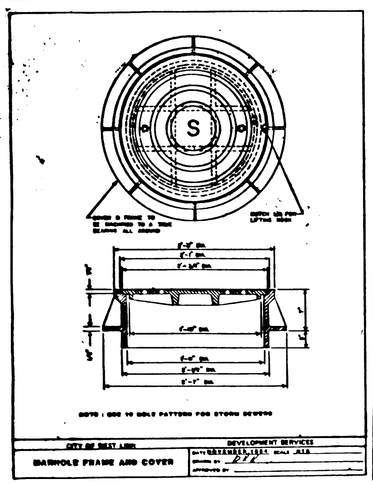
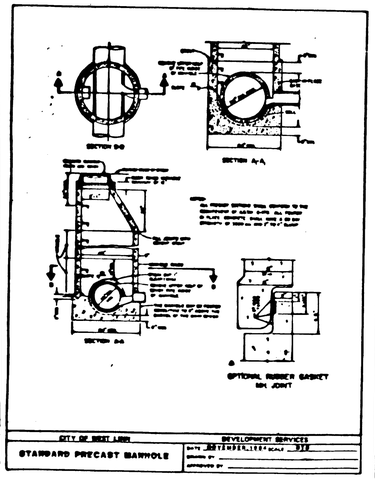
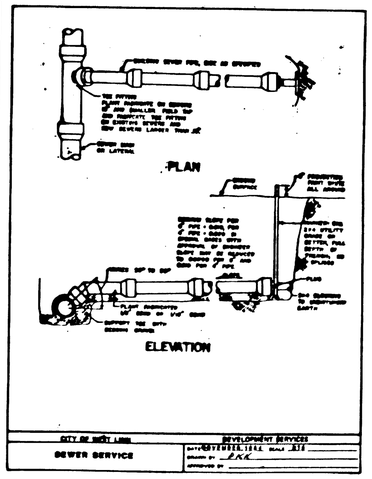
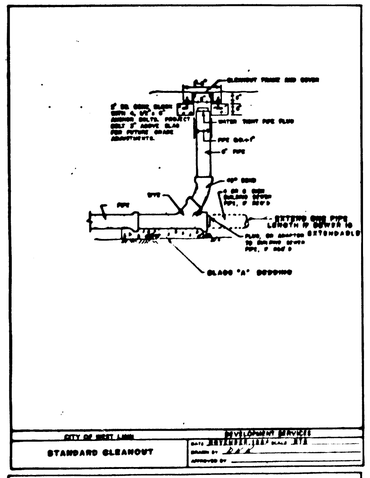


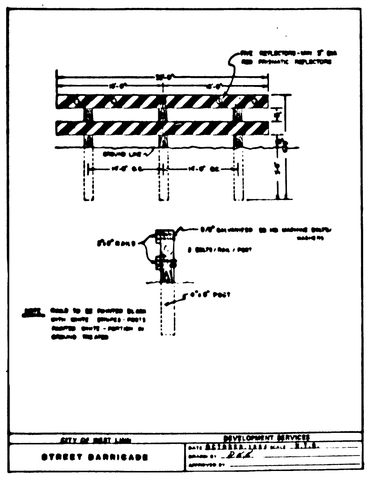
DESIGNED: E.M.N., B.S.S.	SCALE: 1"=50'H., 1"=5'V.	PHASE II	SANITARY SEWER PROFILES
CHECKED: B.S.S., D.W.M.	FILE NO.: 86-158	BARRINGTON HEIGHTS	LINES "B-2" & "B-2-1"
DRAWN: M.J.B., E.M.N.	REVISED: 12/18/86 △1 STAGE 2	WEST LINN, OREGON	SHEET 17 OF 18
DATE: SEPT., 1986	AS BUILT 12/23/86 △2		











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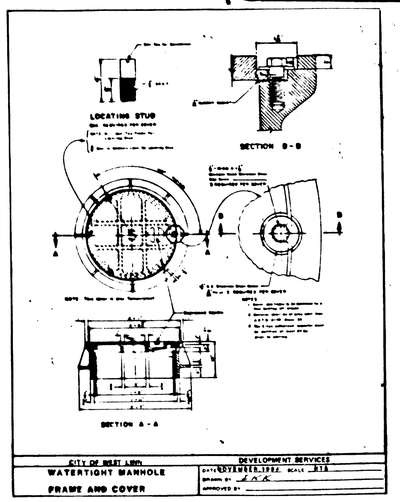

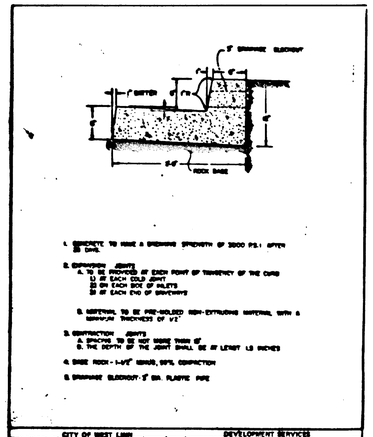

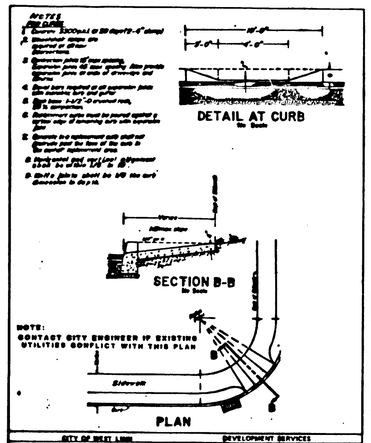

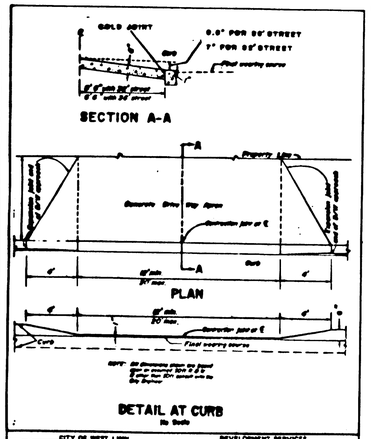

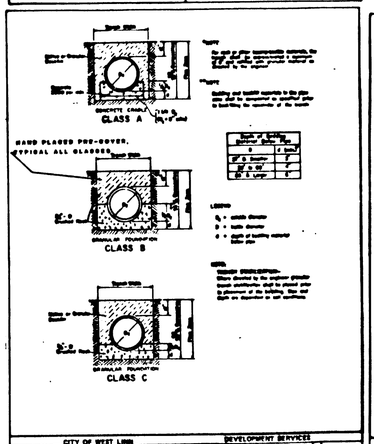

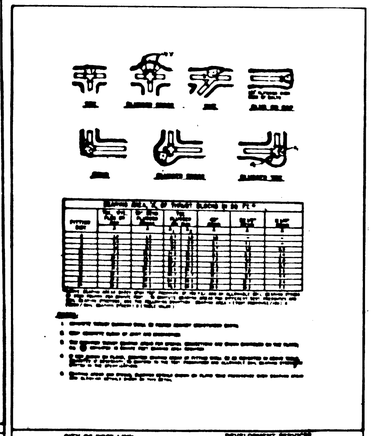

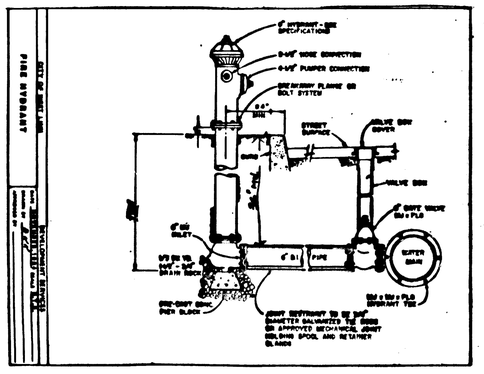

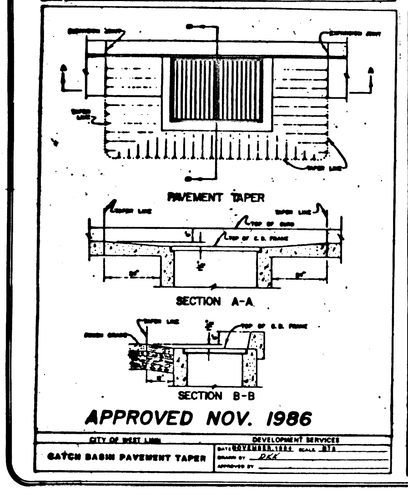

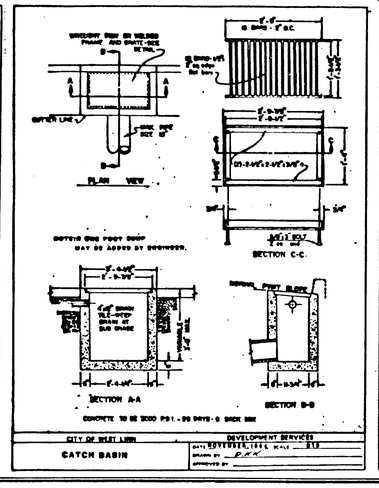

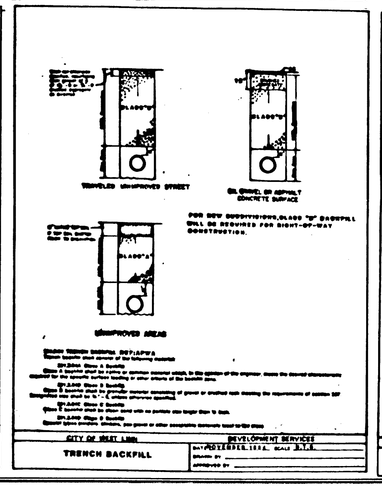

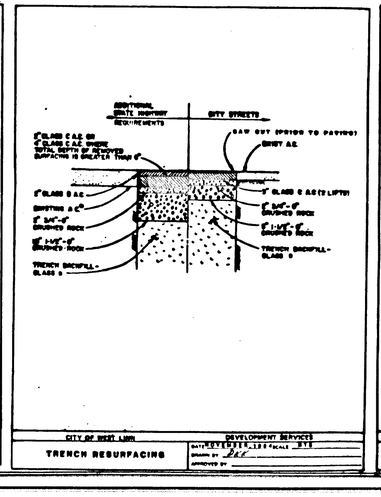

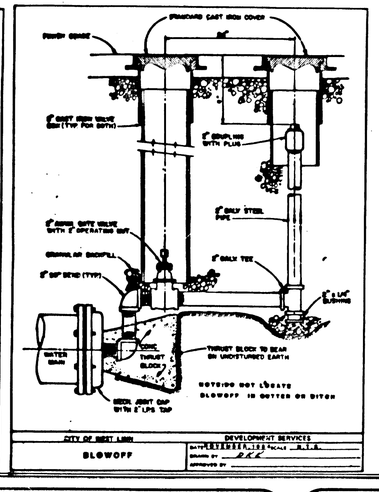

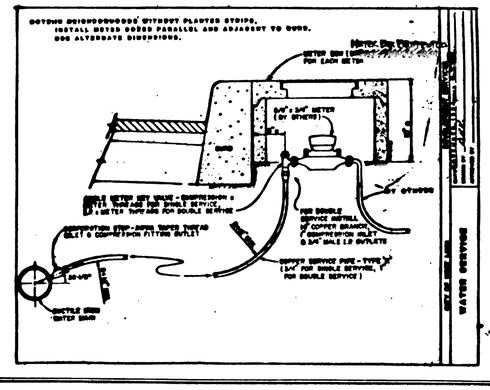

DESIGNED: E.M.N.	SCALE: NO SCALE
CHECKED: B.S.S.	FILE NO.: 86-158
DRAWN: M.J.B.	REVISED:
DATE: SEPT., 1986	

IMPERIAL DEVELOPMENT, INC.
ATTN: MR NEIL NEDELISKY
15875 S.E. 114TH STREET, SUITE "D"
CLACKAMAS, OREGON 97015
PHONE: (503) 655-6291

BARRINGTON HEIGHTS
PHASE II

STANDARD DETAILS

SHEET 18 OF 18