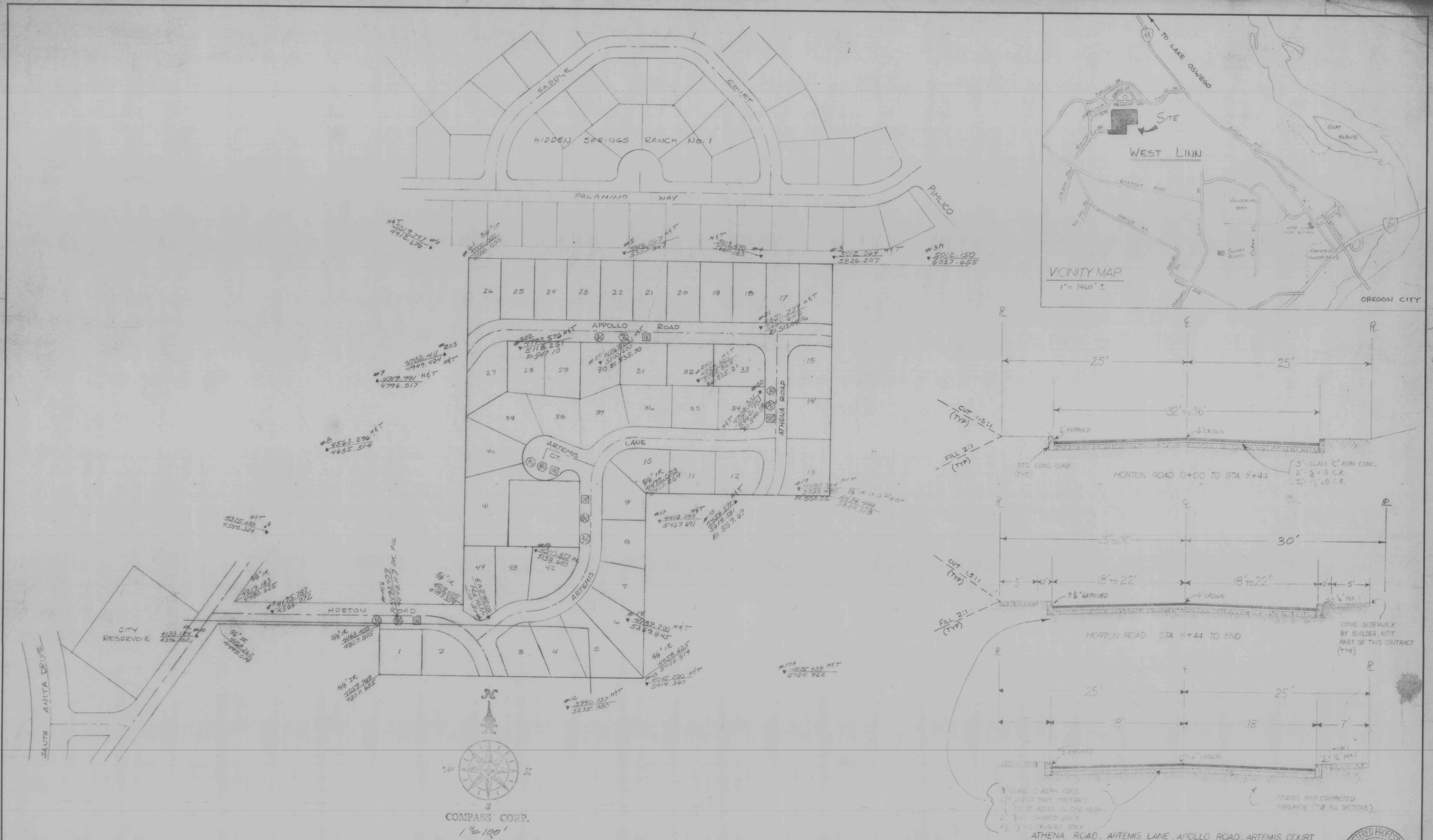


HORTON HEIGHTS '78

DATE	NO.	REVISION
12-7-78	5	AS CONSTRUCTED
6-26-78	4	Approved For Construction
5-15-78	2	STREET NAME
4-6-78	1	PLAT REVISION LOTS 13, 14, 15, 16

DRAWN CLM
SCALE AS SHOWN DATE
FILE 77-1135-931

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222

NICK FOSSES 654-7736
1957 CARRIAGE WAY
WEST LINN, OREGON 97068

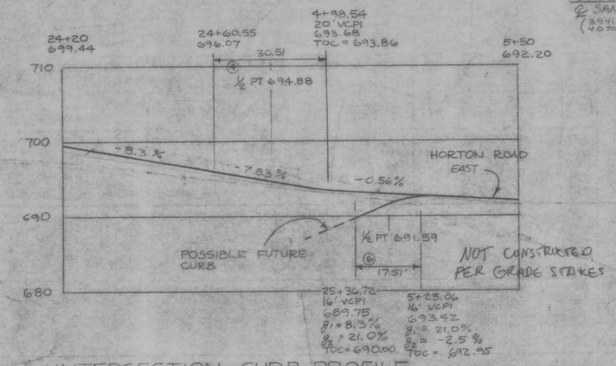
INDEX SHEET

1 / 11

Willamette Print & Blueprint Company

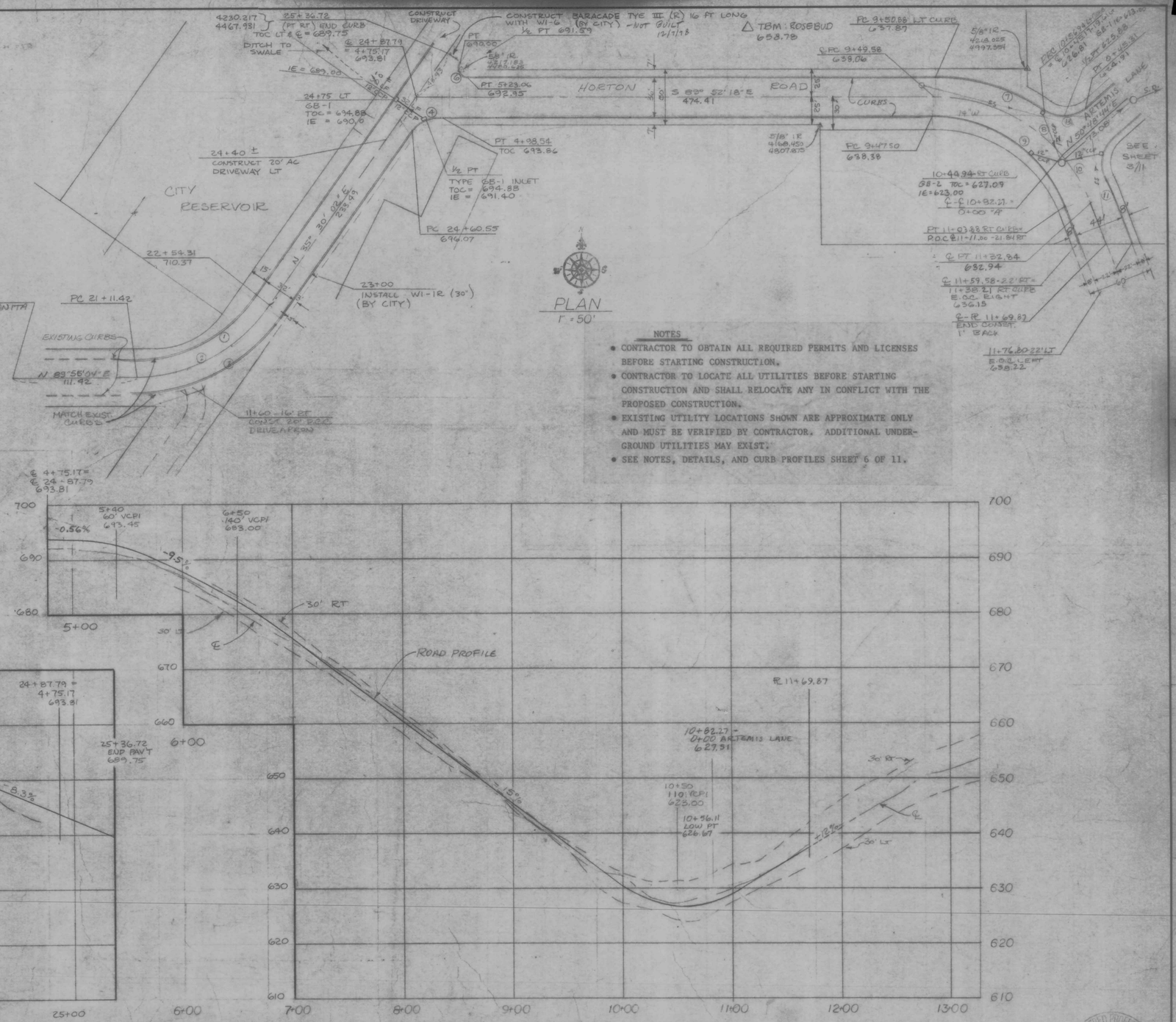
CURVE DATA

CURVE	RADIUS	DELTA	LENGTH	RADIUS PT. COORDINATES NORTH	EAST
1 CURB	134'	54°25'02"	127.65'	4091.304	4181.819
2 ℄	150'	54°25'02"	142.89'	4091.304	4181.819
3 CURB	166'	54°25'02"	158.14'	4091.304	4181.819
4 CURB	32'	54°37'40"	30.51'	4144.223	4462.776
5	NOT	USED			
6 CURB	8'	125°22'20"	17.51'	4220.168	4487.470
7 CURB	172'	35°19'46"	106.06'	4039.207	4915.036
8 ℄	150'	50°41'02"	132.69'	4043.210	4913.589
9 CURB	128'	70°	156.38'	4049.215	4911.419
10 ℄	150'	19°18'58"	50.57'	4043.210	4913.589
11 CURB	172'	6°17'22"	18.88'	4039.207	4915.036
12 CURB	32'	76°58'23"	42.99	4129.149	5098.138
13 CURB	32'	74°38'44"	41.69	4205.374	5033.377



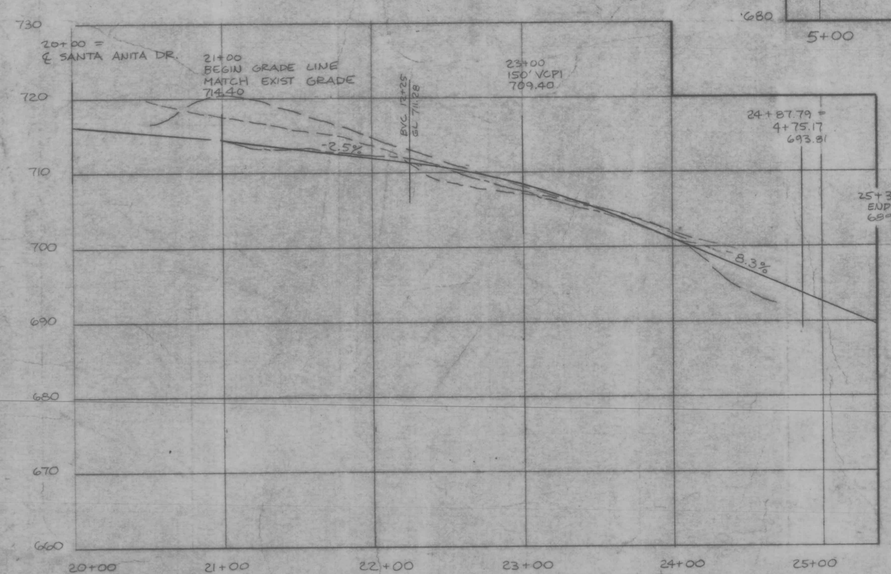
INTERSECTION CURB PROFILE

1" = 20' HORIZ 1" = 10' VERT.



NOTES

- CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
- CONTRACTOR TO LOCATE ALL UTILITIES BEFORE STARTING CONSTRUCTION AND SHALL RELOCATE ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
- EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
- SEE NOTES, DETAILS, AND CURB PROFILES SHEET 6 OF 11.



PROFILE: HORTON ROAD

1" = 50' HORIZ 1" = 10' VERT

HORTON HEIGHTS

CITY OF WEST LINN, OREGON

REGISTERED PROFESSIONAL ENGINEER — OREGON — Gerhard C. Kommer — Feb. 13, 1979 — Compass Corporation

DATE	NO.	REVISION
12-7-78	6	AS-CONSTRUCTED
8-2-78	5	HORTON RD. INTERSECT GRADE
7-19-78	4	INTERSECTION
6-26-78	3	Approved For Construction
6-5-78	2	VC LENGTH, STREET NAMES
4-7-78	1	S.D. PIPE SIZE

DRAWN B.M.C. DESIGN: G.C.K.
SCALE AS SHOWN DATE
FILE 77-1135-931

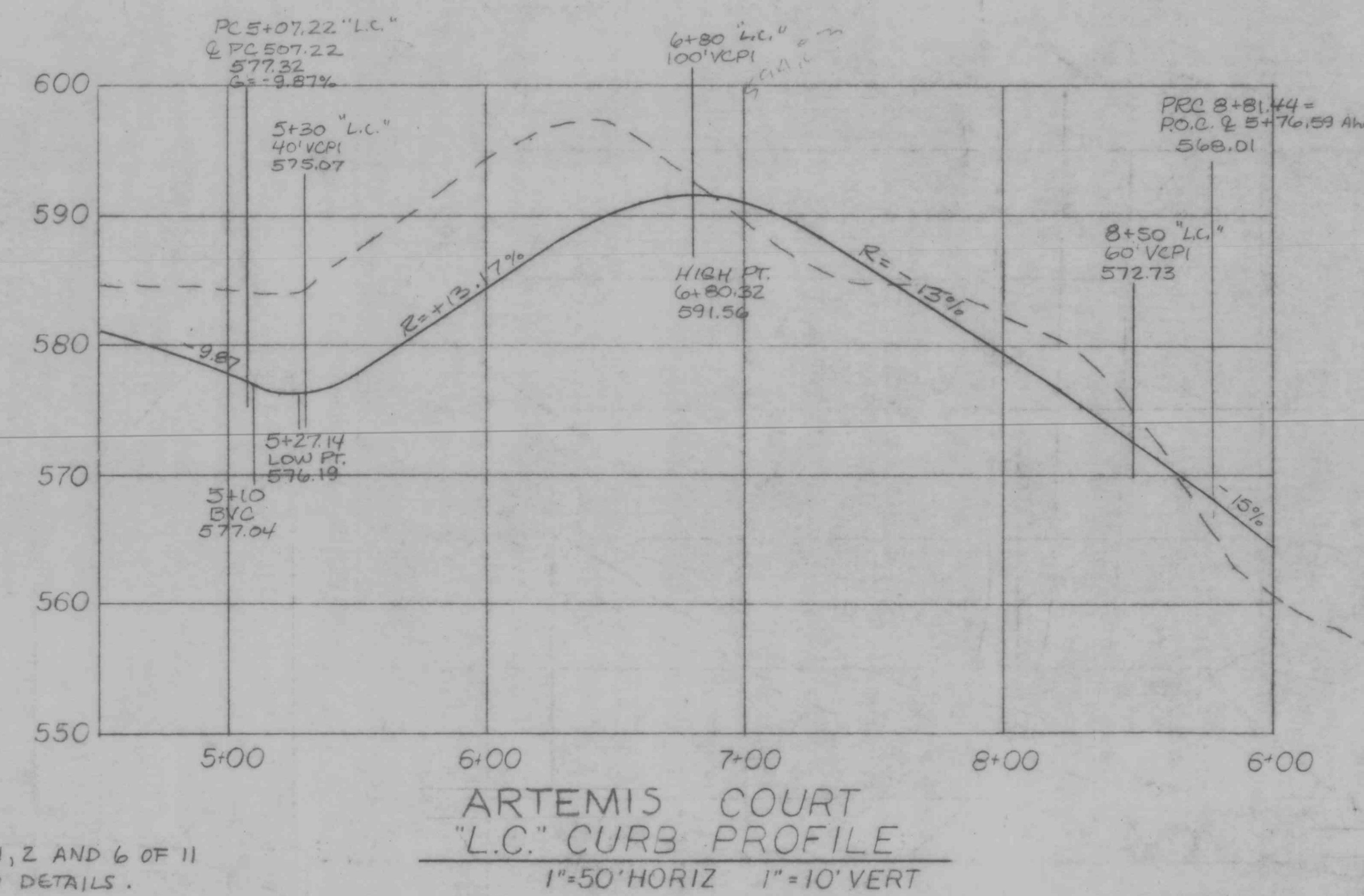
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222
Phone: 653-9093

NICK FOSSES 654-7736
1957 CARRIAGE WAY
WEST LINN, OREGON 97068

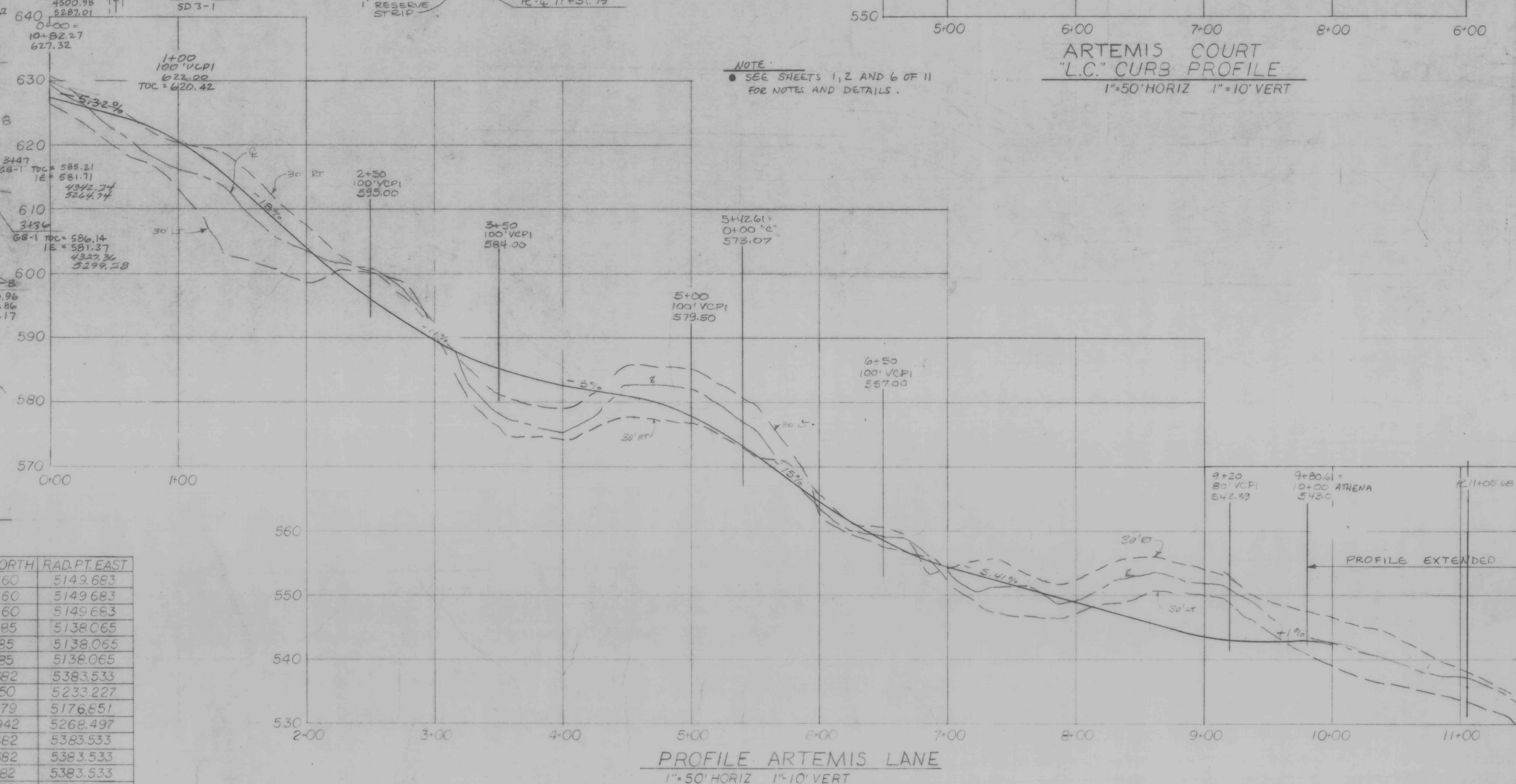
ROADWAY IMPROVEMENT
PLAN AND PROFILE

2/11

Willamette Print & Blueprint Company



NOTE:
- SEE SHEETS 1, 2 AND 6 OF 11 FOR NOTES AND DETAILS.



CURVE DATA

CURVE	RADIUS	DELTA	LENGTH	RAD.PT.NORTH	RAD.PT.EAST
14 CURB	118	36°28'11"	75.11	4106.660	5149.683
15 ℄	100	36°28'11"	63.65	4106.660	5149.683
16 CURB	82	36°28'11"	52.19	4106.660	5149.683
17 CURB	163	87°06'12"	247.80	4351.385	5138.065
18 ℄	145	87°06'12"	220.43	4351.385	5138.065
19 CURB	127	87°06'12"	193.07	4351.385	5138.065
20 ℄	100	20°16'25"	35.38	4500.682	5383.533
21 CURB	32.31	138°38'56"	78.18	4501.150	5233.227
22 CURB	43	248°55'22"	186.81	4551.079	5176.851
23 CURB	32	70°31'45"	39.39	5496.942	5268.497
24 CURB	118	51°20'12"	105.73	4500.682	5383.533
25 ℄	100	70°48'27"	123.58	4500.682	5383.533
26 CURB	82	91°04'52"	130.35	4500.682	5383.533
27 CURB	593	5°35'24"	57.85	5171.302	5590.139
28 ℄	575	5°35'24"	56.10	5171.302	5590.139
29 CURB	557	5°35'24"	54.34	5171.302	5590.139
30 CURB	32	85°28'52"	47.74	4649.343	5650.127
31 CURB	32	94°29'55"	52.78	4549.030	5649.832

HORTON HEIGHTS
CITY OF WEST LINN, OREGON

DATE	NO.	REVISION
12-7-78	5	AS CONSTRUCTED
6-29-78	4	INTERSECT. TOC ATHENA
6-26-78	3	Approved For Construction
6-13-78	2	ALIGNMENT, STORM
4-7-78	1	STORM DR., PROP. LINES

DRAWN B. MC DESIGN: G.C.K.
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

Phone 653-9093

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222

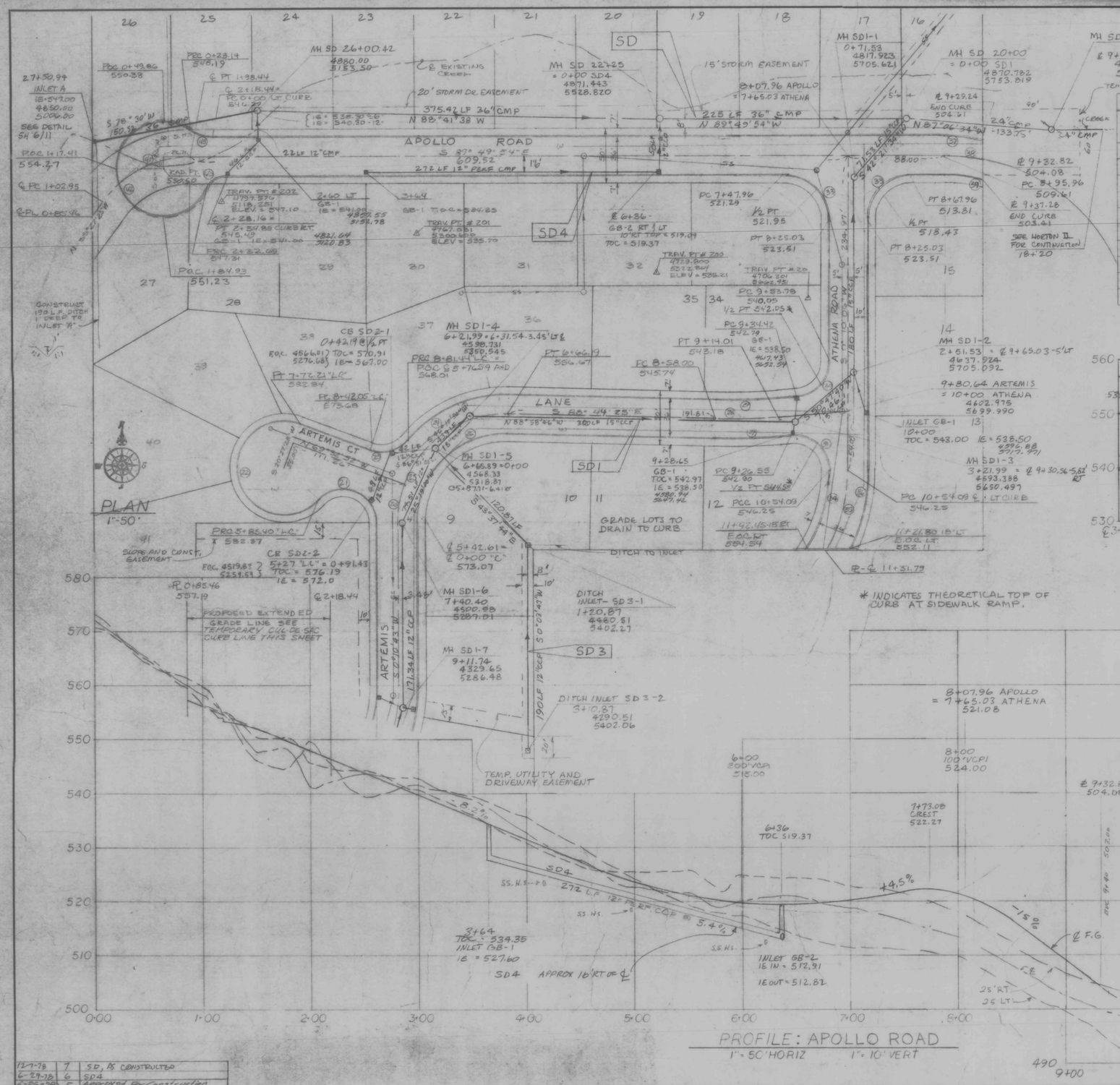
NICK FOSSES
1957 CARRIAGE WAY
WEST LINN, OREGON 97068
654-7736

ROADWAY IMPROVEMENTS
PLAN AND PROFILE

3 / 11

REGISTERED PROFESSIONAL ENGINEER 7697 OREGON JULY 13, 1973 Gerald Calton Kammerman

Willamette Print & Blueprint Company



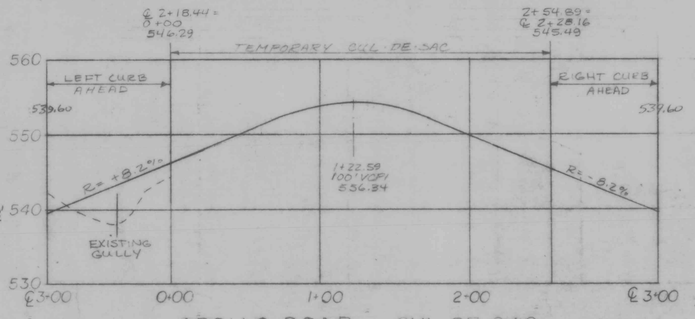
PROFILE: APOLLO ROAD
1"=50' HORIZ 1"=10' VERT

NOTES:

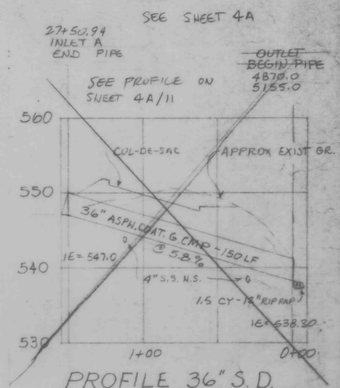
- SEE SHEETS 1, 2, AND 6 OF 11 FOR NOTES AND DETAILS.
- CONTRACTOR TO CONSTRUCT TEMPORARY DRIVEWAY TO PIKE RESIDENCE ALONG PROPERTY LINE OF LOTS 7 AND 8.

CURVE DATA

CURVE	RADIUS	DELTA	LENGTH	RAD.PT.NORTH	RAD.PT.EAST
32 CURB	NOT USED				
33 CURB	42	90°	65.97	—	—
34 CURB	132'	33°44'02"	77.72'	4549.324	5549.833
35 ℄	150'	29°40'50"	77.70'	4549.324	5549.833
36 CURB	168'	25°50'52"	75.79'	4549.324	5549.833
37 CURB	188'	11°12'57"	36.80	4667.681	5788.181
38 ℄	170'	12°25'28"	36.86	"	"
39 CURB	152'	13°55'32"	36.94	"	"
40 CURB	20'	65°36'44"	22.20'	4801.641	5120.779
41 ℄	100'	54°42'41"	95.49'	4739.729	5090.871
42 CURB	43'	279°13'06"	209.65'	4829.806	5064.426
43 CURB	37.23'	35°36'22"	23.14'	4894.899	5111.329



APOLLO ROAD CUL-DE-SAC
1"=50' HORIZ 1"=10' VERT



PROFILE 36" S.D.
1"=50' HORIZ 1"=10' VERT

HORTON HEIGHTS
CITY OF WEST LINN, OREGON

DATE	NO.	REVISION
12-7-78	7	SD, AS CONSTRUCTED
6-29-78	6	SD4
6-26-78	5	Approved For Construction
6-16-78	4	36" CMP, APOLLO RD EXTENSION
6-13-78	3	PLAN, PROFILES, STREET NAMES, STORM
5-15-78	2	SHARON ST
4-7-78	1	S.S., STORM, PLAT REV., V.C.

DRAWN H.L.E. DESIGN: G.C.K.
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

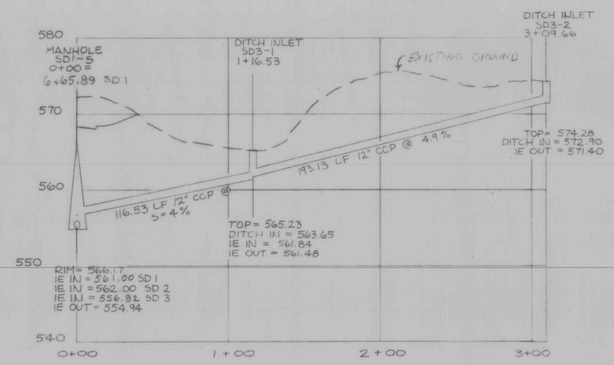
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
Phone 653-9093 6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222

NICK FOSSES
1957 CARRIAGE WAY
WEST LINN, OREGON 97068
654-7736

ROADWAY IMPROVEMENTS
PLAN AND PROFILE

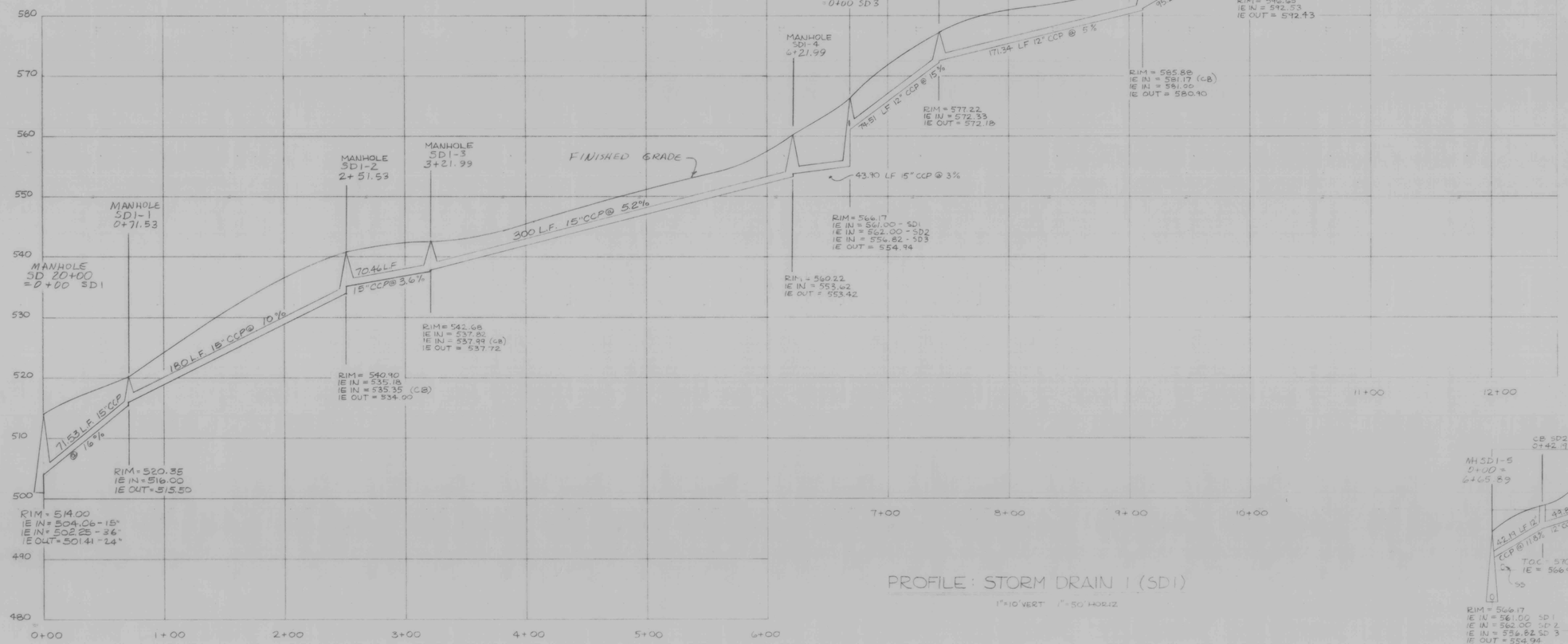
4/11

Willamette Print & Blueprint Company



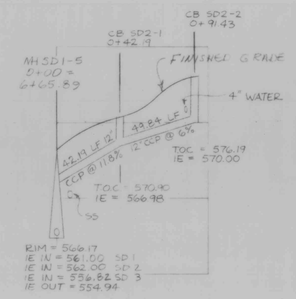
PROFILE : STORM DRAIN 3 (SD3)

1"=10' VERT 1"=50' HORIZ.



PROFILE : STORM DRAIN 1 (SD1)

1"=10' VERT 1"=50' HORIZ



PROFILE : STORM DRAIN SD 2

1"=10' VERT 1"=10' HORIZ

HORTON HEIGHTS
CITY OF WEST LINN, OREGON

DATE	NO.	REVISION
12-7-78	2	AS CONSTRUCTED
6-26-78	1	Approved For Construction

DRAWN CRR
SCALE AS SHOWN DATE 6-15-78
FILE 77-1135 - 931

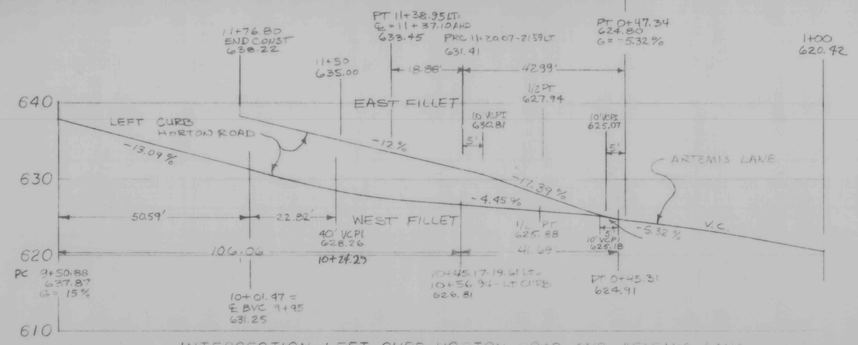
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222

Nick Fosses
1957 Carriage Way
West Linn, Oregon 97068
654-7736

STORM DRAIN PROFILE

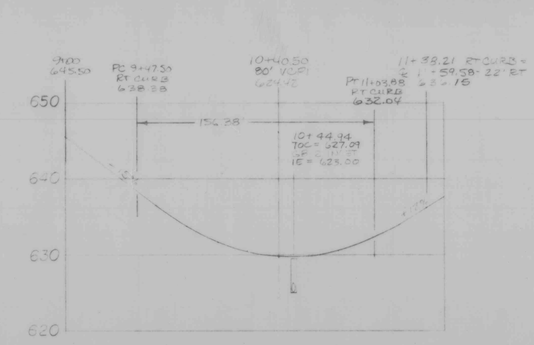
5 / 11

Willamette Print & Blueprint Company



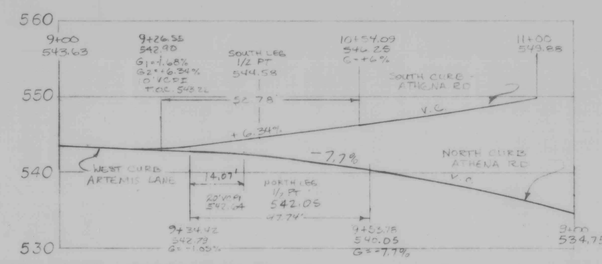
INTERSECTION LEFT CURB HORTON ROAD AND ARTEMIS LANE

1" = 10' VERT 1" = 20' HORIZ



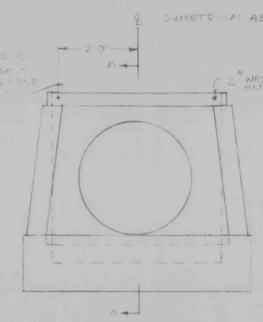
PROFILE RIGHT CURB HORTON ROAD AT ARTEMIS LANE

1" = 50' HORIZ 1" = 10' VERT

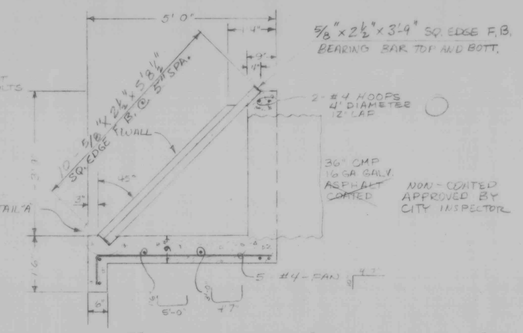


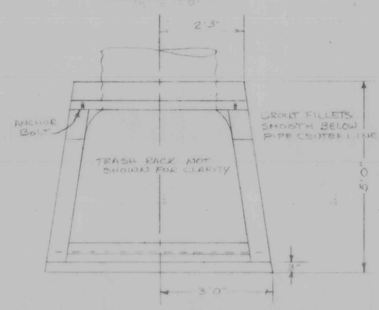
WEST LEG OF INTERSECTION OF ARTEMIS LANE AND ATHENA ROAD

1" = 10' VERT 1" = 20' HORIZ

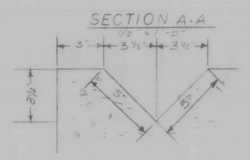


ELEVATION



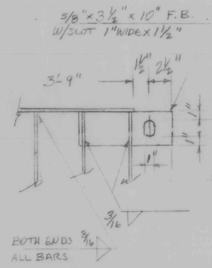


PLAN



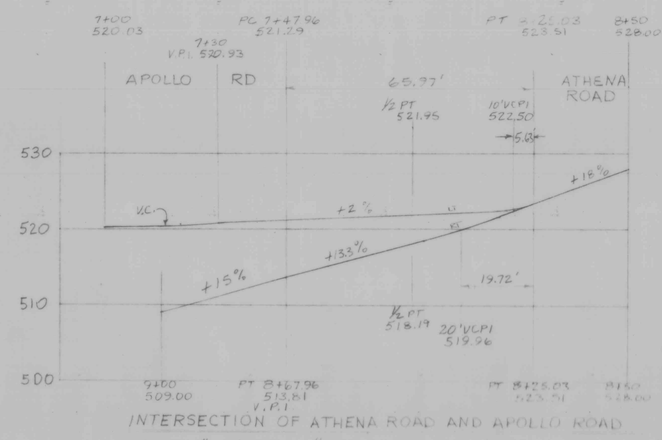
DETAIL A

DETAIL B



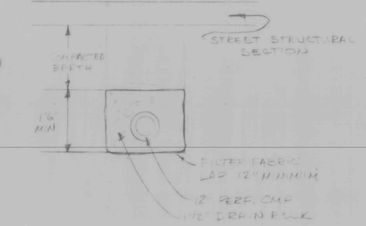
(SEE SHEET 4 OF 11 FOR LOCATION)

INLET "A" NOT COMPLETED AS OF 12/7/78

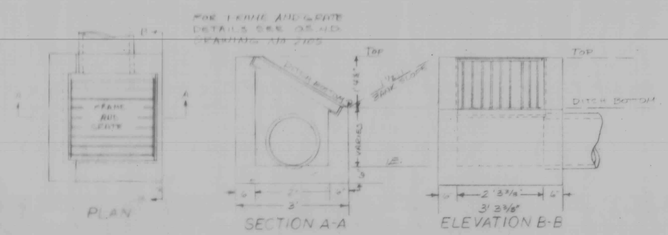


INTERSECTION OF ATHENA ROAD AND APOLLO ROAD

1" = 10' VERT 1" = 20' HORIZ



SUBDRAIN PIPE



STANDARD DITCH INLET

1/2" = 1'-0"

STREET AND STORM DRAINAGE NOTE:

- ALL WORK AND MATERIAL TO BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS DEPARTMENT O.S.H.D. AND A.P.W.A. OREGON CHAPTER SPECIFICATION.
- CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL RELOCATE ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
- CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
- IT IS ANTICIPATED THAT THE OWNER WILL HAVE NECESSARY EASEMENTS BY THE TIME THESE PLANS ARE APPROVED FOR CONSTRUCTION. HOWEVER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILTY TO DETERMINE THE ADEQUACY OF THE EASEMENT OBTAINED. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO WITHIN THE EASEMENT LIMITS OR MAKE SPECIAL ARRANGEMENTS WITH THE PROPERTY OWNERS FOR THE ADDITIONAL AREA REQUIRED. BEFORE FINAL PAYMENT WILL BE MADE, THE CONTRACTOR WILL BE REQUIRED TO FURNISH THE OWNER WITH WRITTEN RELEASES FROM PROPERTY OWNERS WHERE CONTRACTOR'S OPERATIONS HAVE NOT BEEN KEPT WITHIN THE ORIGINAL EASEMENT LIMITS OBTAINED BY OWNER.
- EXISTING UTITLIY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST. STREET CONSTRUCTION SHALL BE IN ACCORDANCE WITH DIVISION TWO (2) STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, A.P.W.A. OREGON CHAPTER.
- MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH 2½ INCHES MINUS CRUSHED ROAK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED AT THE LOWEST MOISTURE CONTENT AT WHICH A HANDFUL OF THE SOIL CAN BE MOLDED BY A FIRM CLOSING OF THE HAND. (95% COMPACT. AASHTO T99 METHOD D).
- AN INSPECTOR WILL BE ON THE PROJECT AS DEEMED NECESSARY BY ENGINEER. IF INSPECTOR IS NOT PRESENT, CONTRACTOR SHALL CALL FOR INSPECTION OF TRENCHES PRIOR TO BACKFILLING AND PRIOR TO POURING MANHOLE BASES. ALSO, CONTRATOR SHALL NOTIFY THE ENGINEER WHEN SUBGRADING IS COMPLETED AND 24 HOUR PRIOR TO PLACEMENT OF ROCK BASE MATERIAL AND 24 HOURS PRIOR TO FINAL PAVING FOR INSPECTION OF THE WORK. SEE SECTION 5.01 A.P.W.A. SPECIFICATIONS.
- ASPHALT CONCRETE PAVEMENT MIX TO BE DESIGNED FROM A JOB MIX FORMULA APPROVED BY THE O.S.H.D. FOR MATERIAL USED. CONTRACTOR TO PROVIDE ENGINEER WITH CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT. UNLESS OTHERWISE INDICATED
- CONCRETE CULVERT PIPE SHALL BE ASTM C 14 CLASS 2 NONREINFORCED CONCRETE PIPE OR ASTM C 76 CLASS III REINFORCED CONCRETE PIPE.
- RUBBER RING JOINT SHALL BE USED ON SLOPES GREATER THAN 8 PERCENT. PIPE BEDDING SHALL CONFORM WITH GRANULAR BEDDING AND BACKFILL REQUIREMENTS OF A.P.W.A. DIV. III SECTION 61-3.03 B2 AND 61-3.05
- CORRUGATED METAL PIPE SHALL BE 16 GAGE GALVANIZED STEEL PIPE AND COUPLING BANDS CONFORMING TO OSHD SECTION 605.
- FILTER FABRIC SHALL BE MIRAFI 140 AS MANUFACTURED BY CELANESE FIBERS, FILTER -X MANUFACTURED BY CARTHAGE MILLS OR TYPAR MANUFACTURED BY DUPONT OR EQUAL APPROVED BY ENGINEER.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, AND OTHER MATERIAL IN THE ROADWAY AND WHERE INDICATED ON THE PLAN. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET LOCAL REGULATIONS. TRENCHES WITHIN THE RIGHTS-OF-WAY SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
- COMPACTION SHALL BE SUFFICIENT TO PREVENT FUTURE SETTLEMENT. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE REQUIRED COMPACTION.
- TRENCH BACKFILL OUTSIDE OF PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL. BEDDING TO BE CLASS "B".

REGISTERED PROFESSIONAL ENGINEER — OREGON — JULY 13, 1973 — Robert Cotton Rammerman

HORTON HEIGHTS

DATE	NO.	REVISION
12-7-78	6	AS CONSTRUCTED
7-17-78	5	INTERSECT. ATHENA / APOLLO
6-29-78	4	INTERSECT. ARTEMIS / ATHENA
6-26-78	3	Approved For Construction
6-8-78	2	STREET WIDTHS, INTS, INTER. GRADES
4-7-78	1	TRASH RACK, CURB RETURN, DETAIL

DRAWN B.M.C. DESIGN GCK
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

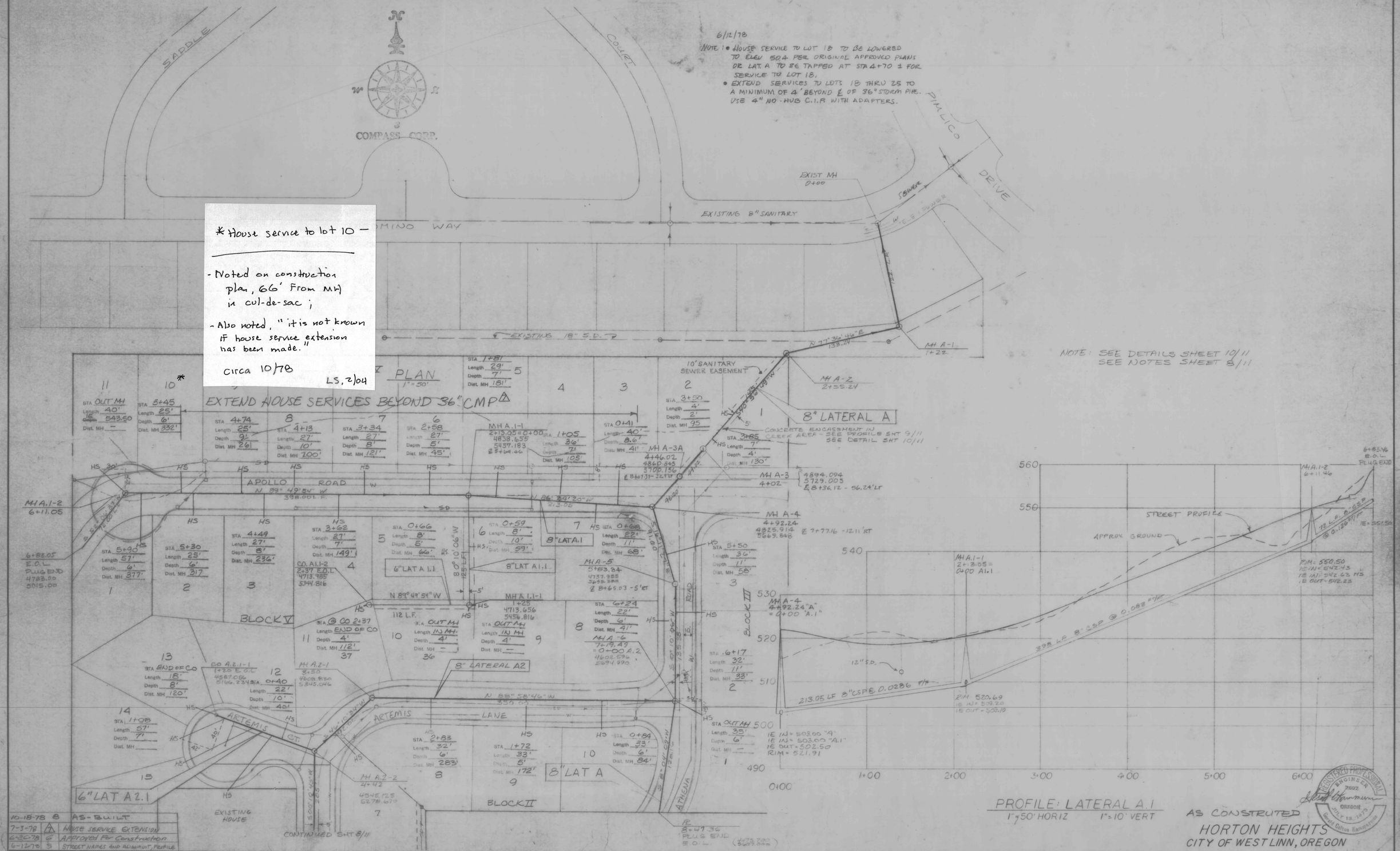
COMPASS CORPORATION
ENGINEERING SURVEYING PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222

NICK FOSSES 654-7736
1957 CARRIAGE WAY
WEST LINN, OREGON 97068

ROADWAY AND STORM DRAIN IMPROVEMENT

6 / 11

Willamette Print & Blueprint Company



6/12/78

NOTE: • HOUSE SERVICE TO LOT 18 TO BE LOWERED TO ELEV 504 PER ORIGINAL APPROVED PLANS OR LAT. A TO BE TAPPED AT STA 4+70 ± FOR SERVICE TO LOT 18.
• EXTEND SERVICES TO LOTS 18 THRU 25 TO A MINIMUM OF 4' BEYOND ℄ OF 36" STORM PIPE. USE 4" NO-HUB C.I.P. WITH ADAPTERS.

* House service to lot 10 —

- Noted on construction plan, 66' From MH in cul-de-sac;
- Also noted, "it is not known if house service extension has been made."

circa 10/78

LS, 2/04

DATE	NO.	REVISION
10-18-78	8	AS-BUILT
7-3-78	7	HOUSE SERVICE EXTENSION
6-26-78	6	APPROVED FOR CONSTRUCTION
6-12-78	5	STREET NAMES AND ALIGNMENT, PROFILE
5-15-78	4	SHARON ST
4-11-78	3	MH A-3A, STA, APPROVED FOR CONST.
4-6-78	2	LAT A1.1, STORM DRAIN
3-24-78	1	MANHOLE A-3 - 4+00 LAT A

DRAWN B.M.C. DESIGN GCK
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222
653-9093 222-4652

NICK FOSSES 654-7736
1957 CARRIAGE WAY
WEST LINN, OREGON 97068

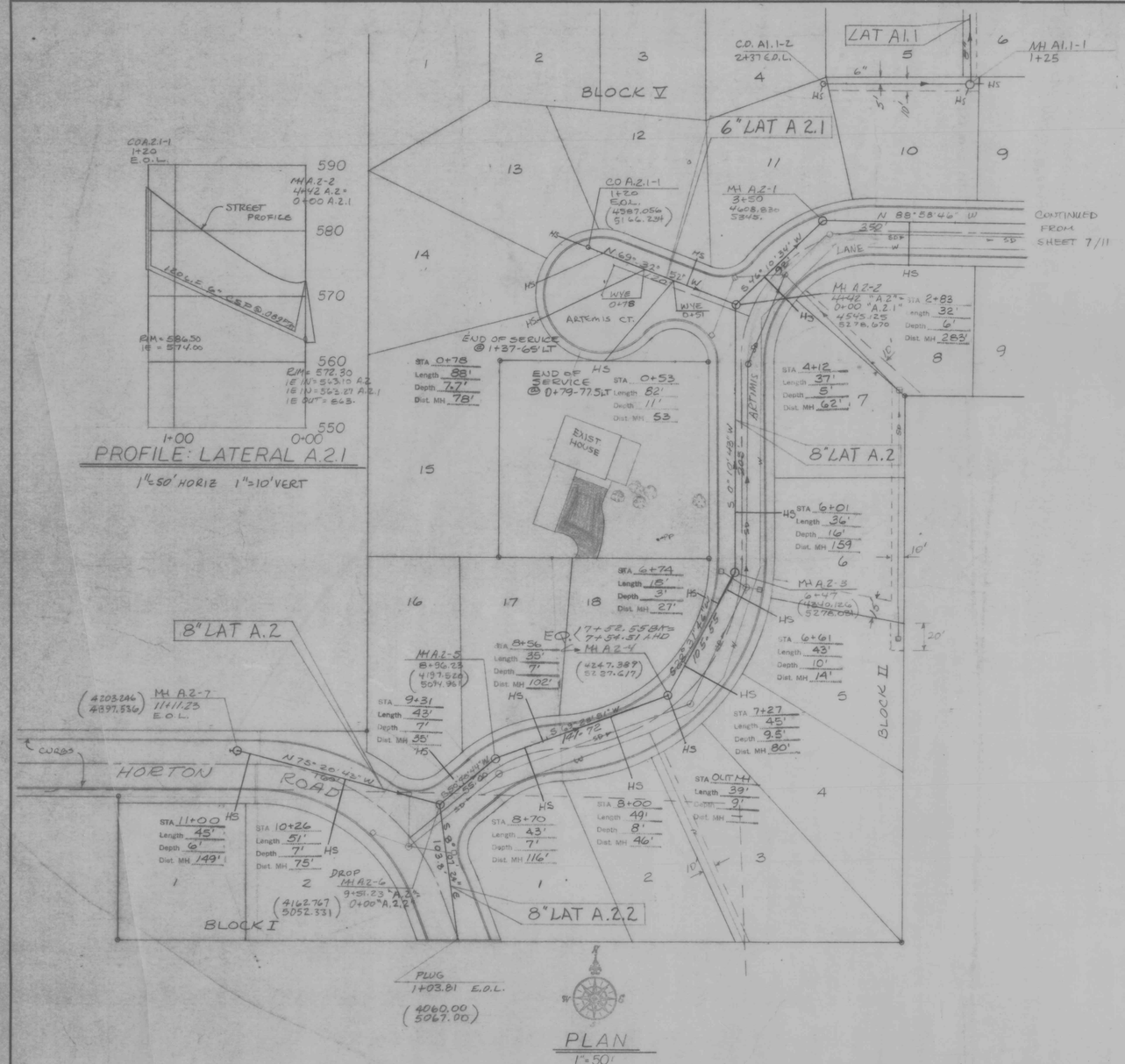
SANITARY SEWER PLAN AND PROFILE

7/11

Willamette Print & Blueprint Company

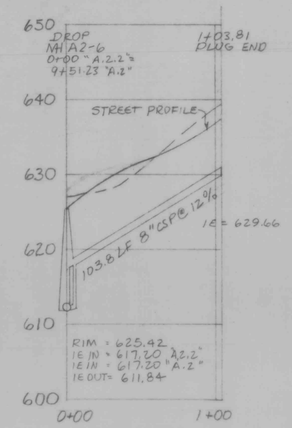
PROFILE: LATERAL A.2.1

1"=50' HORIZ 1"=10' VERT



PLAN

1"=50'



LAT A 2.2

1"=50' HORIZ 1"=10' VERT

SANITARY SEWER CONSTRUCTION NOTES:

- CONSTRUCTION SHALL CONFORM WITH THE CITY WEST LINN AND A.P.W.A. SPECIFICATIONS FOR CONSTRUCTION OF SANITARY SEWERS.
- CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
- IT IS ANTICIPATED THAT THE OWNER WILL HAVE NECESSARY EASEMENTS BY THE TIME THESE PLANS ARE APPROVED FOR CONSTRUCTION. HOWEVER, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE ADEQUACY OF THE EASEMENT OBTAINED. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO WITHIN THE EASEMENT LIMITS OR MAKE SPECIAL ARRANGEMENTS WITH THE PROPERTY OWNERS FOR THE ADDITIONAL AREA REQUIRED. BEFORE FINAL PAYMENT WILL BE MADE, THE CONTRACTOR WILL BE REQUIRED TO FURNISH THE OWNER WITH WRITTEN RELEASES FROM PROPERTY OWNERS WHERE CONTRACTOR'S OPERATIONS HAVE NOT BEEN KEPT WITHIN THE ORIGINAL EASEMENT LIMITS OBTAINED BY OWNER.
- DUCTILE IRON SEWER PIPE TO BE CONFORM TO ANSI A21.51 WITH PUSH ON JOINTS. PIPE SHALL BE CEMENT MORTAR LINED AND SEAL COATED.
- CONCRETE SANITARY SEWER PIPE SHALL BE ASTM C 14, CLASS 2 NONREINFORCED CONCRETE PIPE WITH RUBBER GASKETS.
- CONTRACTOR TO LOCATE ALL UTILITIES BEFORE STARTING CONSTRUCTION AND SHALL RELOCATE ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
- EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
- ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGMENT TO ACCOMADATE UTILITIES OR EXISTING SEWER LINES AS REQUIRED.
- BUILDING SERVICE CONNECTIONS TO BE 4-INCH SEWER PIPE AND SHALL EXTEND TO DISTANCE SHOWN ON PLANS AND END AT ELEVATION SHOWN.
- SERVICE CONNECTION TO SLOPE 2% MINIMUM UP TO FUTURE HOUSE LOCATION FROM SEWER LATERIAL OR MAIN.
- WYES AND 1/8TH BENDS REQUIRED FOR SERVICE CONNECTION.
- STATIONING AND DISTANCE SHOWN ON PLAN AND PROFILE ARE HORIZONTAL AND NOT SLOPE DISTANCE.
- TRENCHES WITHIN THE RIGHTS-OF-WAY SHALL BE BACKFILLED WITH GRANULAR MATERIAL.
- COMPACTION SHALL BE SUFFICIENT TO PREVENT FUTURE SETTLEMENT. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE REQUIRED COMPACTION. SUBSEQUENT SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- TRENCHES OUTSIDE OF RIGHTS-OF-WAY MAY BE BACKFILLED WITH EXCAVATED TRENCH MATERIALS. CONTRACTOR SHALL MOUND SOIL OVER TRENCH TO COMPENSATE FOR NORMAL SETTLEMENT.
- CONTRACTOR SHALL PREPARE A PRINT OF THE ENGINEER SHOWING AS-CONSTRUCTED DATA: STATION OF WYE ALONG SEWER, LENGTH OF CONNECTION AND DEPTH OF SERVICE CONNECTION AT PROPERTY LINE OR END OF SERIVCE AND ANY CHANGES MADE DURING CONSTRUCTION.
- INSPECTOR WILL BE ON PROJECT AS DEEMED NECESSARY BY ENGINEER. IF INSPECTOR IS NOT PRESENT, CONTRACTOR SHALL CALL FOR INSPECTION PRIOR TO BACKFILLING TRENCH AND TO WITNESS PIPELINE TESTING.

HORTON HEIGHTS
CITY OF WEST LINN, OREGON
AS CONSTRUTED

REGISTERED PROFESSIONAL ENGINEER 2697 OREGON JULY 13, 1973 Gerald Calvin Kannberg

DATE	NO.	REVISION
10-18-78	7	AS-BUILT
6-26-78	6	Approved For Construction
6-8-78	5	STREET GRADE, STORM
5-16-78	4	Move San. MH A2-4 BMW
5-15-78	3	SHARON ST.
4-11-78	2	LEGALS, APP. FOR CONSTRUCTION
4-7-78	1	LAT A1.1, STORM, WATER

DRAWN B.M. DESIGN GCK
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

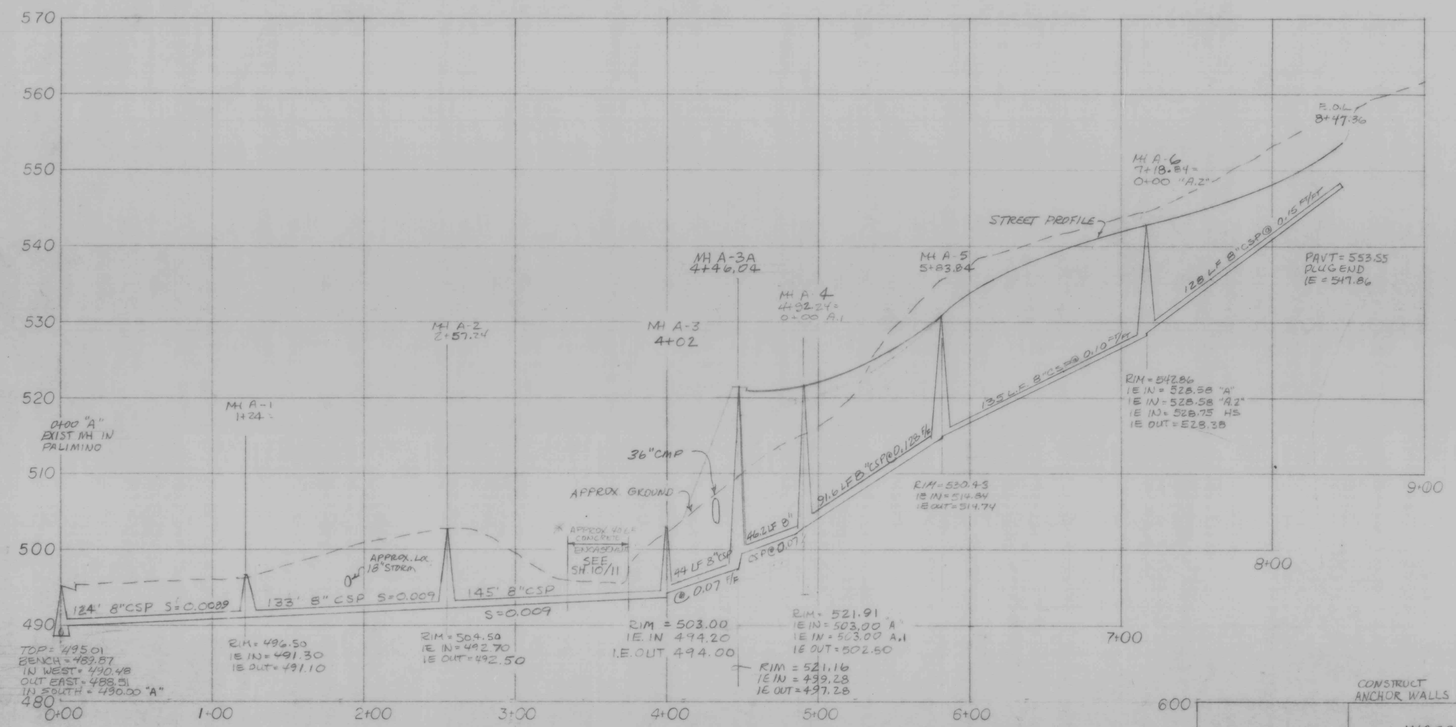
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222
653-9093 222-4652

NICK FOSSES 654-7736
1957 CARRIAGE WAY
WEST LINN, OREGON 97068

SANITARY SEWER IMPROVEMENT PLAN

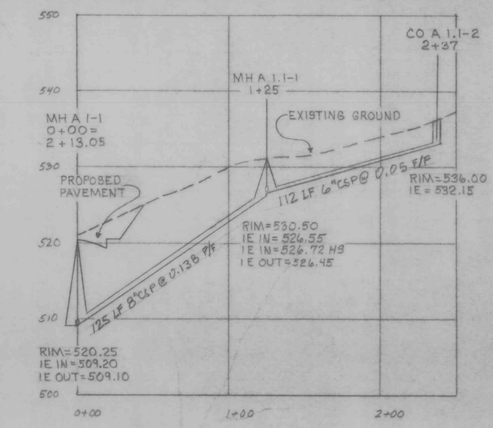
8/11

Willamette Print & Blueprint Company



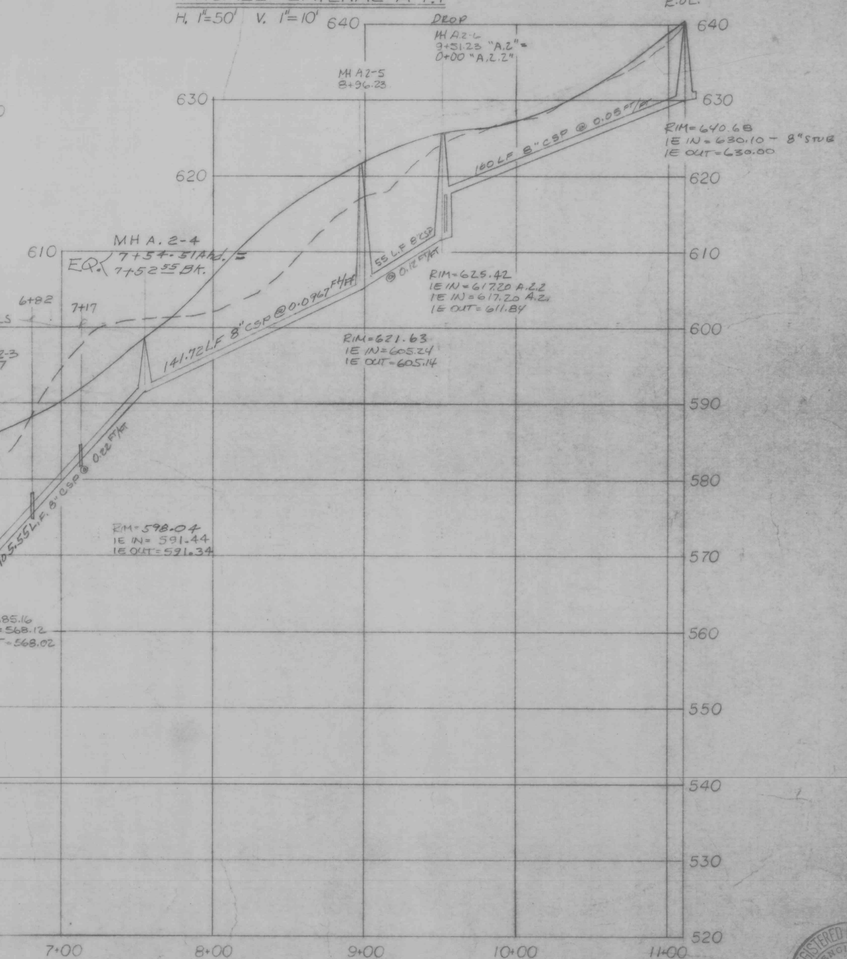
PROFILE: LATERAL A

1"=50' HORIZ 1"=10' VERT



PROFILE LATERAL A 1.1

H. 1"=50' V. 1"=10'



* NOTE: EXTENT OF CONCRETE ENCASEMENT TO BE DETERMINED IN THE FEILD. SEE CONSTRUCTION DETAIL SHEET 10/11

PROFILE: LATERAL A 2

1"=50 HORIZ 1"=10' VERT

HORTON HEIGHTS
CITY OF WEST LINN, OREGON

REGISTERED PROFESSIONAL ENGINEER 2002 OREGON JULY 19, 1972 Ronald Carlton Kammerzell

DATE	NO.	REVISION
12-7-78	7	AS CONSTRUCTED
6-26-78	6	Approved For Construction
6-9-78	5	RIM ELEV, STREET PROFILE A-2 & A
4-16-78	4	Move San. MH A-2-4 ONLY
4-11-78	3	LATA PROFILES, APPROVED FOR CONST.
4-6-78	2	PROFILES LAT A2 AND A1.1
3-24-78	1	MANHOLE A-3 4+00 ADDED

DRAWN H.L.E. DESIGN: G.C.K.
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

COMPASS CORPORATION
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Phone 653-9093
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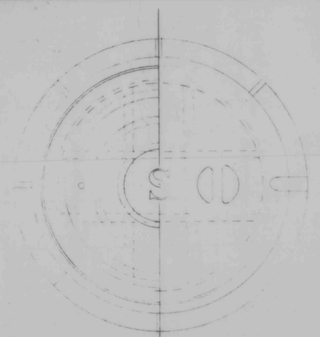
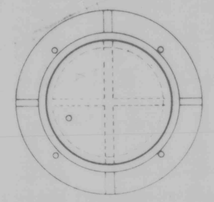
SANITARY SEWER PROFILES

9/11

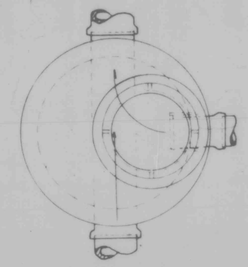
Willamette Print & Blueprint Company



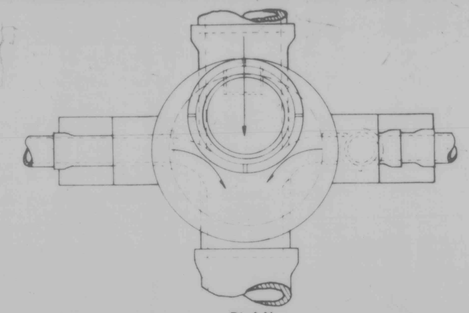
GRAY IRON CASTINGS SHALL CONFORM TO A.S.T.M. A-48



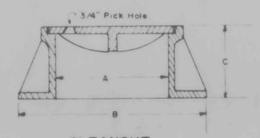
PLAN



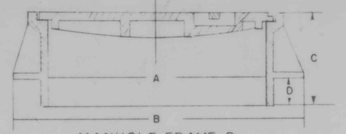
PLAN of TOP



PLAN

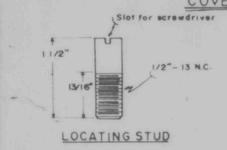


CLEANOUT
FRAME AND COVER



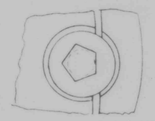
MANHOLE FRAME & COVER

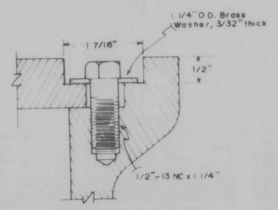
FRAME AND COVER						
TYPE	DIMENSION IN INCHES				WEIGHT IN Lbs.	
	A	B	C	D	FRAME	COVER
MANHOLE	23	31	10	3	240	140
CLEANOUT-8"CSP	12	20	7 3/4	--		
CLEANOUT-6"CSP	9	11 1/2	6 3/4	--		



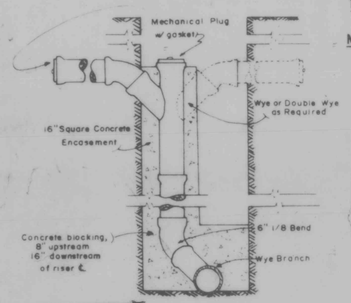
LOCATING STUD

CAP SCREW
3 Req'd., Pent. Head, Bronze or Cad. Plate

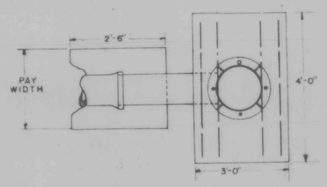


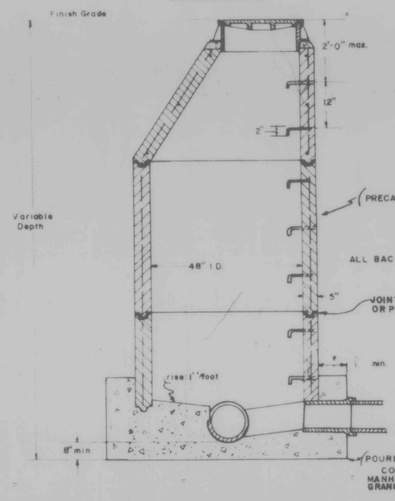


TAMPERPROOFING
for
MANHOLE COVERS
NOT TO SCALE

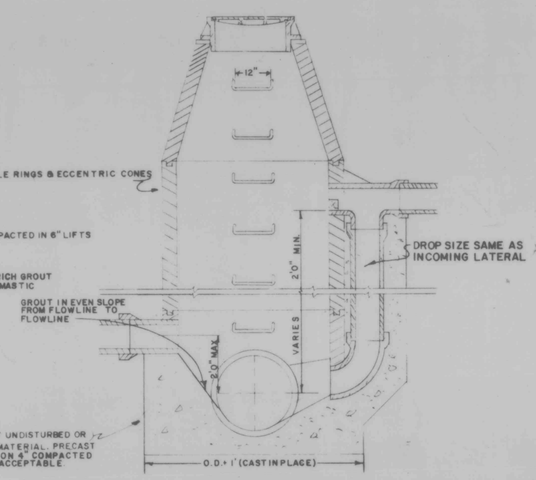


STANDING CONNECTION
SCALE 1/2"=1'-0"
BEDDING AS REQUIRED



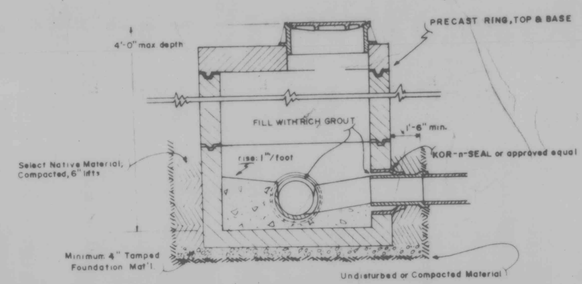


STANDARD MANHOLE
SCALE 1/2"=1'-0"

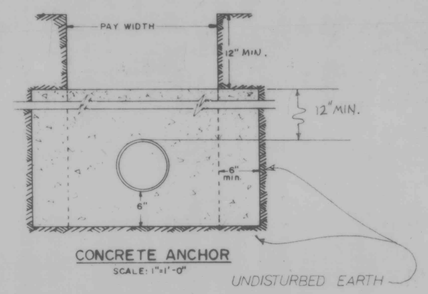


DROP MANHOLE
SCALE 1/2"=1'-0"

PRECAST MATERIAL SHALL CONFORM TO A.S.T.M. C-478

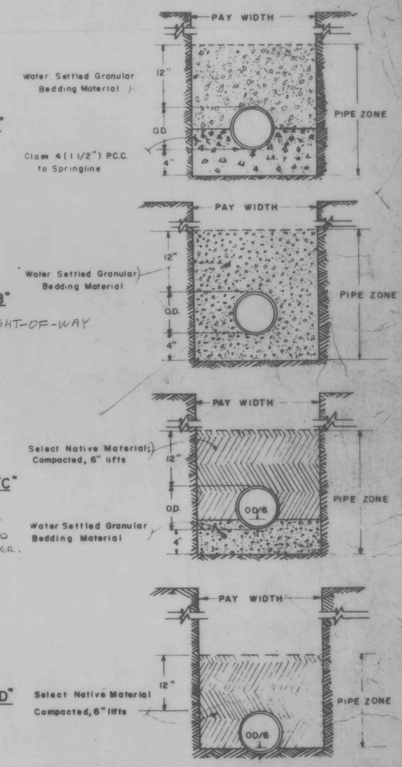


SHALLOW MANHOLE
SCALE 1/2"=1'-0"

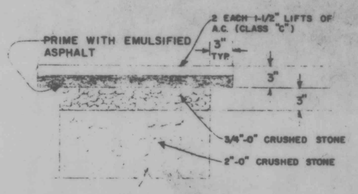


CONCRETE ANCHOR
SCALE: 1"=1'-0"

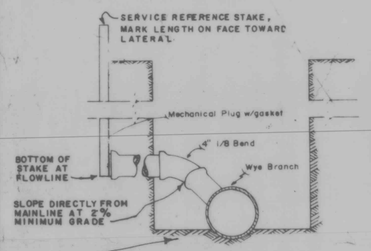
CONCRETE ANCHOR SPACING	
SLOPE PERCENT	MINIMUM CENTER TO CENTER
20 to 34	35 feet
35 to 50	25 feet
OVER 50	15 feet or CONCRETE ENCASE



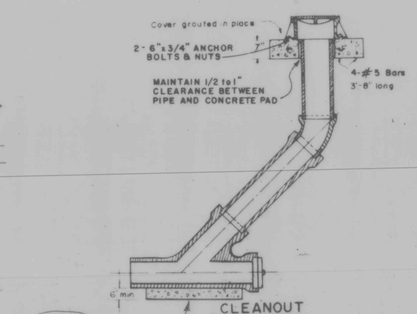
BACKFILL AND
BEDDING REQUIREMENTS
NOT TO SCALE



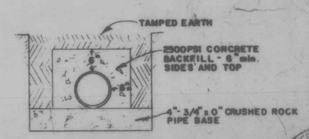
A.C. PAVEMENT RESTORATION



SERVICE CONNECTION
SCALE 1"=1'-0"
BEDDING AS REQUIRED



CLEANOUT
SCALE 1/2"=1'-0"
CONCRETE TO SPRINGLINE



CREEK CROSSING CONCRETE
BACKFILL DETAIL

REGISTERED PROFESSIONAL ENGINEER 2692 OREGON JULY 19, 1973 Donald E. Kranzmann

HORTON HEIGHTS
CITY OF WEST LINN, OREGON

DATE	NO.	REVISION
4-11-76	2	APPROVED FOR CONSTRUCTION
4-7-78	1	BEDDING

DRAWN B.M.C. RL
SCALE AS SHOWN DATE 2-28-78
FILE 77-1135-931

COMPASS CORPORATION
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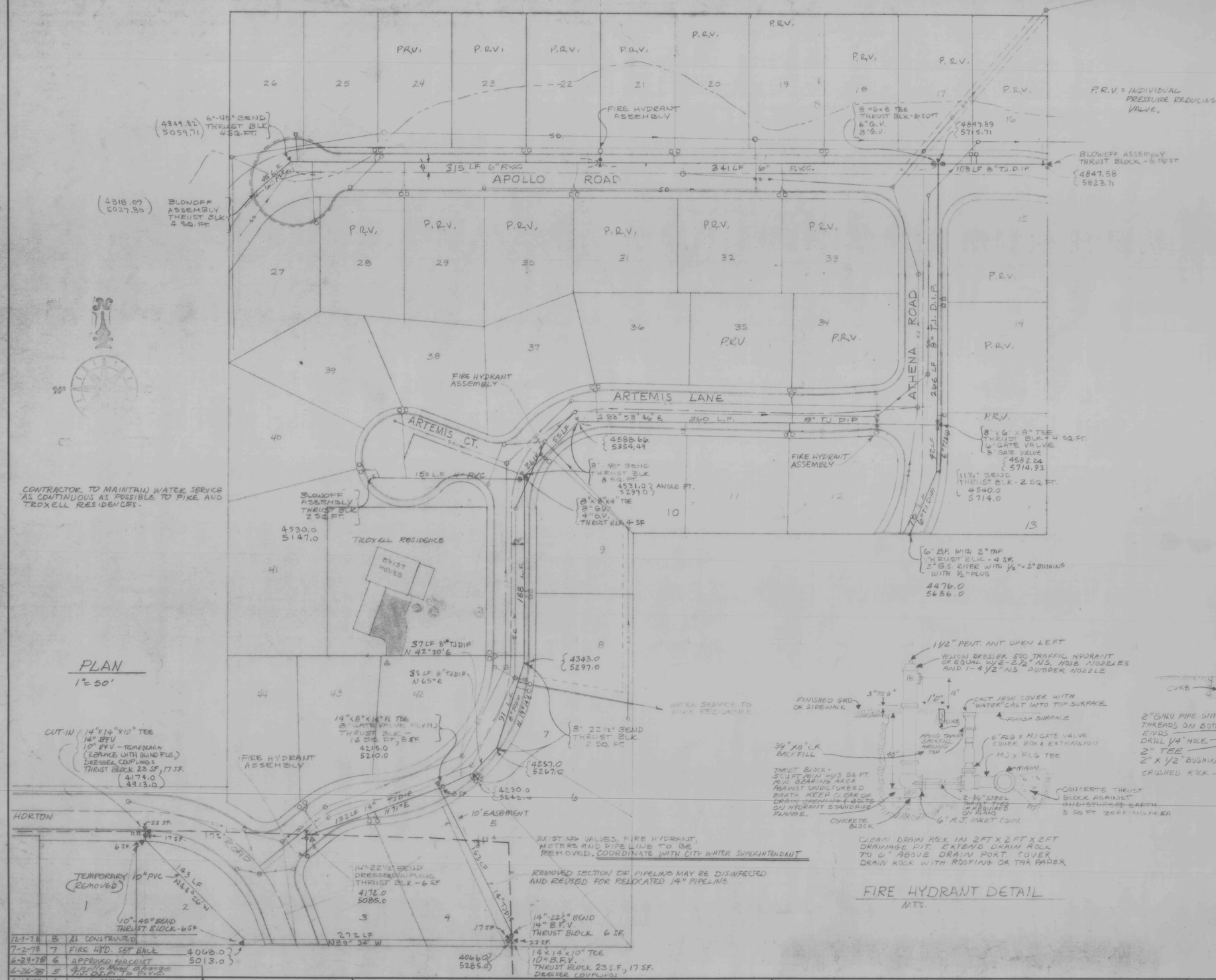
NICK FOSSES
1957 CARRIAGE WAY 654-7736
WEST LINN, OREGON 97068

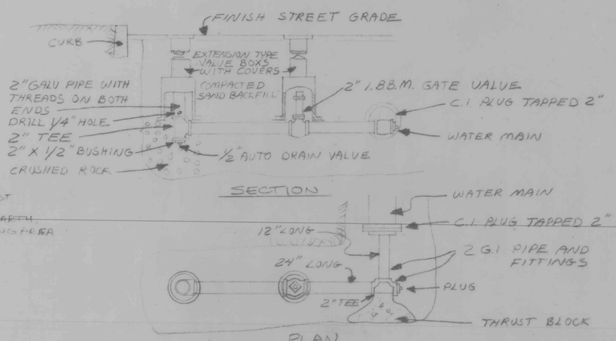
CONSTRUCTION DETAILS

10 / 11

Willamette Print & Blueprint Company



FIRE HYDRANT DETAIL
N.T.S.



BLOW OFF DETAIL
NTS.

WATER LINE CONSTRUCTION NOTES:

- CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL CONSTRUCT THE WATERMAIN TO AVOID CONFLICT WITH EXISTING UTILITIES.
- CONTRACTOR TO OBTAIN ALL PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
- ALL WORK AND MATERIALS TO CONFORM WITH THE CITY OF WEST LINN, THE LATEST EDITION OF OREGON STATE HEALTH DIVISION ADMINISTRATIVE RULES, CHAPTER 333, A.W.W.A. AND A.P.W.A. STANDARDS.
- ALL PIPE TO BE MINIMUM COVER OF 36 INCHES BELOW FUTURE STREET GRADES. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT PIPE INTERIORS, FITTINGS, AND VALVES AGAINST CONTAMINATION.
- FITTINGS AND PIPE SECTIONS THAT WILL NOT BE DISINFECTED BY CHLORINE LINE FOR 24 HOURS SHALL HAVE THE INTERIORS SWABBED WITH A 5 PERCENT HYPOCHLORITE SOLUTION BEFORE THEY ARE INSTALLED.
- PVC PIPE MAY BE USED WHERE SHOWN ON PLANS, PIPE SHALL CONFORM TO CAST IRON O.D.'S AND HAVE RING-TITE JOINTS. PIPE SHALL BE JOHNS - MANVILLE BLUE BRUTE PVC WATER PIPE OR APPROVED EQUAL AND SHALL HAVE AN SDR OF 14 ~~13.5~~ INSTALLATION SHALL BE IN ACCORDANCE WITH BLUE BRUTE INSTALLATION GUIDE.
- DUCTILE CAST IRON WATER MAINS AND APPURTENANCES TO BE INSTALLED IN ACCORDANCE WITH A.W.W.A. STANDARD C 600.
- TRENCH TO BE BACKFILLED WITH NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ROCKS OR FOREIGN MATERIALS. BACKFILL TO BE COMPACTED TO APPROXIMATELY 90 PERCENT AASHTD T-99 METHOD D.
- PIPELINE TO BE TESTED AT 150 PSI AND HELD AT THAT PRESSURE FOR 2 HOUR. PIPELINE TO BE THOROUGHLY DISINFECTED AND FLUSHED IN ACCORDANCE WITH A.W.W.A. STANDARD C 601.
- PIPELINE TO BE TYTON JOINT CEMENT NORTAR LINED DUCTILE IRON PIPE CLASS 52 AND SHALL CONFORM TO ASTM C110, C150 AND C151.
- HOUSE SERVICES TO BE COPPER TYPE 'K" SEAMLESS SOFT ANNFALED.
- SINGLE SERVICES TO BE 3/4 INCH.
- DOUBLE SERVICES TO BE 1 INCH.
- METER BOXES TO BE NO. 1 METER BOX AS MANUFACTURED BY METER BOX EQUIPMENT COMPANY, TIGARD, OREGON.
- COPPER TUBE BENDS TO BE SMOOTH RADIUS.
- SERVICE TAPS TO BE AT LEAST 18 INCHES APART. SADDLES REQUIRED.
- CONTRACTOR TO INSTALL PIPELINE AND HOUSE SERVICES TO AN INCLUDING CURB STOPS AND METER BOXES.
- VALVES TO BE A.W.W.A C 500 FOR GATE OR C 504 FOR BUTTERFLY. VALVES TO HAVE 2 INCH OPERATING NUT WITH COUNTER CLOCKWISE OPENING. AND NONRISING STEM. OPERATOR FOR BUTTERFLY VALVE TO BE LOCATED TOWARD CENTER OF STREET.
- CONCRETE THRUST BLOCKS TO BE CONSTRUCTED AT ALL TEES, BENDS, FIRE HYDRANTS, BLOWOFFS AND WHERE INDICATED ON PLANS. THE MINIMUM BEARING SURFACE AGAINST UNDISTURBED SOIL TO BE AS SHOWN ON PLANS.
- FIRE HYDRANTS TO BE DRY-BARREL AND COMPLY WITH A.W.W.A. C502.
- SERVICES TO HAVE COMPRESSION TYPE FITTINGS.
- INDIVIDUAL PRESSURE REDUCTING VALVES ARE REQUIRED FOR EACH HOUSE SERVICE WHERE STATIC PRESSURE IS 80 P.S.I. OR GREATER

DATE	NO.	REVISION
12-7-78	8	AS CONSTRUCTED
7-2-78	7	FIRE HYD. SET BACK
6-29-78	6	APPROVED FOR CONST
6-26-78	5	Grade Road Change Fr. 10.0 to 6.5 V.C.
6-14-78	4	Cosmt., Lengths
6-8-78	3	STREET NAMES, S.P., S.F., ALIGNMENT
5-15-78	2	SHARON ST.
4-6-78	1	TEMP. WATERLINE, F.H., STORM DR.

DRAWN B.Mc DESIGN GCK
SCALE 1" = 50' DATE 2-28-78
FILE 77-1135-931

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
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1957 CARRIAGE WAY
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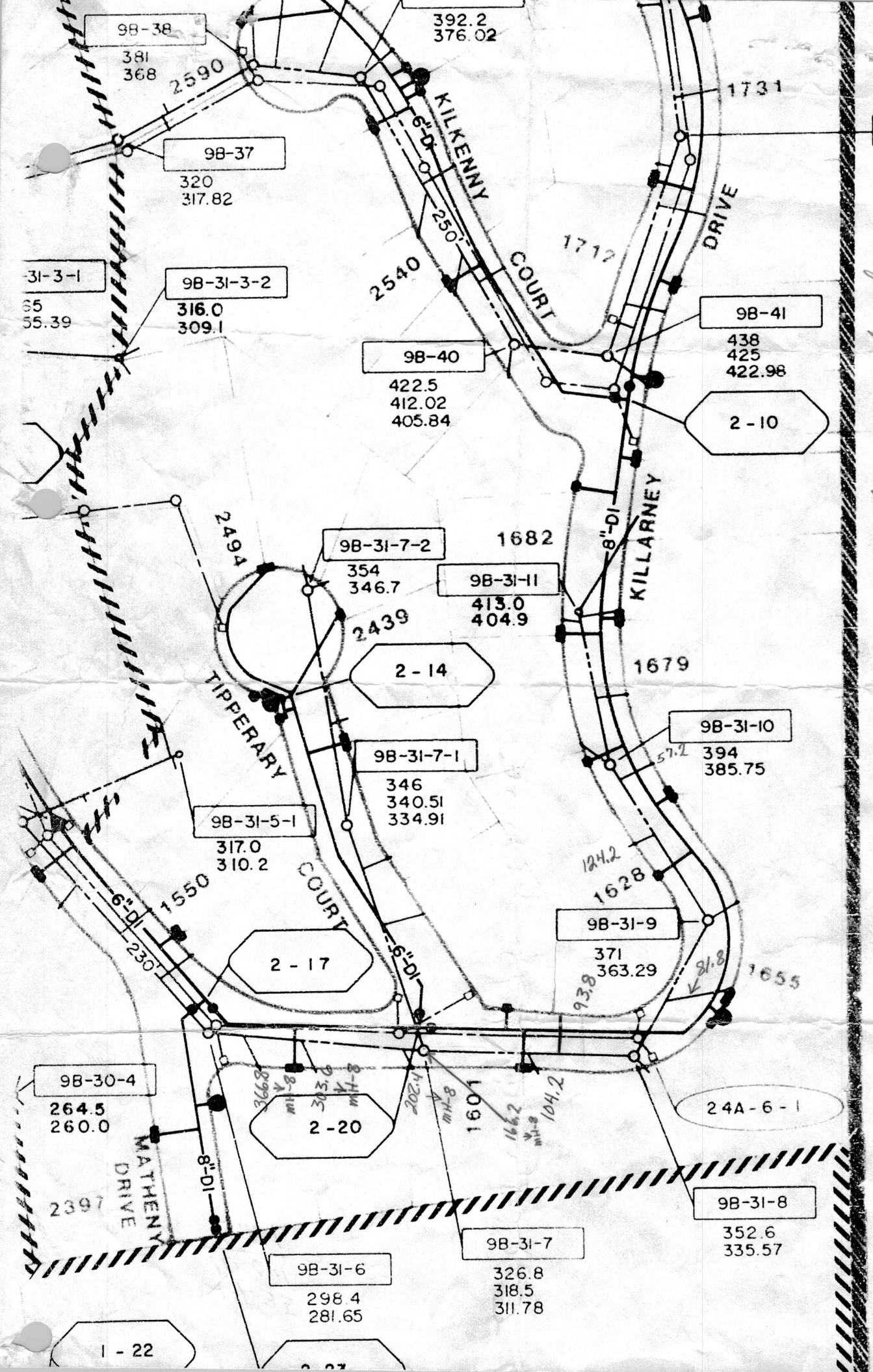
WATERLINE AND SERVICE PLAN

11/11

HORTON HEIGHTS

Willamette Print & Blueprint Company



T.V. for Tax location

60

8-23-89