RIDGEBROOK PARK SUBDIVISION

WEST LINN, OREGON

GENERAL NOTES:

1. ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF WEST LINN DESIGN STANDARDS, O.S.H.D. AND A.P.W.A. OREGON CHAPTER SPECIFICATIONS.
2. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL ARRANGE FOR THE RELOCATION OF ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
3. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
4. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
5. THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO PERFORM HIS WORK.
6. CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL AND OTHER MATERIAL IN THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET LOCAL REGULATIONS.

GENERAL EROSION CONTROL NOTES:

1. 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.)
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/ LANDSCAPING IS ESTABLISHED.
3. 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 ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
4. THE ESC FACILITIES SHOWN ON 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-LADEN WATER DOES NOT LEAVE THE SITE.
5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
6. 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.
7. 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.
8. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
9. CUT AND FILL SLOPES SHALL BE GROOVED BY DRIVING A CRAWLING TRACTOR AND CUTTING FURROWS ALONG SLOPE CONTOURS TO CATCH RAIN WATER AND PROVIDE COVERAGE OF FERTILIZER AND SEED.

ROAD & STORM SEWER NOTES:

1. ALL WORK AND MATERIALS TO CONFORM TO 1990 EDITION OREGON CHAPTER A.P.W.A. AND THE CITY OF WEST LINN DEPT. OF PUBLIC WORKS DESIGN STANDARDS.
2. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES PRIOR TO STARTING CONSTRUCTION.
3. CONTRACTOR SHALL NOTIFY KAMPE ASSOCIATES, INC., AND THE CITY OF WEST LINN DEPT. OF ENGINEERING 48 HOURS BEFORE STARTING CONSTRUCTION OR 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS OR HOLIDAYS. CONTRACTOR SHALL NOTIFY KAMPE ASSOCIATES, INC., OF ANY SHUTDOWNS SO AS TO ELIMINATE UNNECESSARY INSPECTION TIME.
4. ALL CONCRETE MANHOLES SHOWN ON THE PLANS ARE 48 INCHES MINIMUM DIAMETER AND CONFORM TO CITY OF WEST LINN STANDARDS. MANHOLE EXTENSION RINGS SHALL BE LIMITED TO A MAXIMUM OF TWELVE INCHES TOTAL HEIGHT.
5. CONCRETE CULVERT PIPE SHALL BE ASTM C14, "CLASS 3," NONREINFORCED CONCRETE PIPE. PVC PIPE SHALL CONFORM TO ASTM 3034, SDR 3S SPECIFICATIONS. CAP SHALL CONFORM TO ASTM 305.2.02.
6. EXCESS EXCAVATION TO BE SPREAD AND COMPACTED EVENLY ON LOTS AS DIRECTED BY OWNER. VEGETATION AND TOPSOIL TO BE STRIPPED OF FILL AREAS PRIOR TO FILLING. (95% COMPACTION, AASHTO T99).
7. ALL TRENCH EXCAVATION SHALL CONFORM TO A.P.W.A. DIVISION III, SECTION 301.1.01, AND SHALL BE UNCLASSIFIED. ALL EXCESS MATERIAL FROM THE TRENCH EXCAVATION SHALL BE DISPOSED OF ON-SITE.
8. PIPE BEDDING SHALL CONFORM WITH GRANULAR BEDDING AND BACKFILL REQUIREMENTS OF A.P.W.A. DIVISION III, SECTION 301.2.02 AND SHALL BE 3/4"-0" CRUSHED ROCK.
9. TRENCHES WITHIN THE RIGHT-OF-WAYS SHALL BE "CLASS B" BACKFILL WITH SELECT GRANULAR MATERIAL CONFORMING TO CITY OF WEST LINN STANDARDS AND SHALL BE 3/4"-0" CRUSHED ROCK.
10. COMPACTION SHALL BE PER A.P.W.A. DIVISION III, SECTION 301.3.07. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE REQUIRED COMPACTION.
11. TRENCH BACKFILL OUTSIDE OF PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL CONFORMING TO "CLASS A" PER CITY OF WEST LINN STANDARDS.
12. MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH 1 1/2"-0" CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE COMPACTED TO 92% OF MAXIMUM RELATIVE DENSITY PER AASHTO T180. MOISTURE CONTENT SHALL BE ±2% OF OPTIMUM.
13. CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN SUBGRADE IS COMPLETE AND 24 HOURS PRIOR TO PLACEMENT OF ROCK BASE MATERIAL AND 24 HOURS PRIOR TO FINAL PAVING FOR AN INSPECTION OF THE WORK. FAILURE TO DO SO WILL MAKE ANY SUBGRADE FAILURE OR DRAINAGE PROBLEMS THE RESPONSIBILITY OF THE CONTRACTOR.
14. ASPHALT CONCRETE PAVEMENT MIX TO BE DESIGNED FROM A MIX FORMULA APPROVED BY O.S.H.D. FOR MATERIAL USED. CONTRACTOR TO PROVIDE ENGINEER WITH CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT, UNLESS OTHERWISE INDICATED.
15. ALL HOUSE SERVICE STUBOUTS TO BE A MINIMUM OF 3' INTO PROPERTY AND/OR BEYOND EASEMENT LINE AND TO BE MARKED (STORM SERVICE) WITH A 2" X 4" FOR FUTURE LOCATION. SERVICE STUBOUTS TO BE 6" DIAMETER PIPE.

SANITARY SEWER NOTES:

1. ALL WORK AND MATERIALS TO CONFORM TO 1990 EDITION OREGON CHAPTER A.P.W.A. AND THE CITY OF WEST LINN DEPT. OF PUBLIC WORKS DESIGN STANDARDS.
2. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES PRIOR TO STARTING CONSTRUCTION.
3. CONTRACTOR SHALL NOTIFY KAMPE ASSOCIATES, INC., AND THE CITY OF WEST LINN DEPT. OF ENGINEERING 48 HOURS BEFORE STARTING CONSTRUCTION OR 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS OR HOLIDAYS. CONTRACTOR SHALL NOTIFY KAMPE ASSOCIATES, INC., OF ANY SHUTDOWN SO AS TO ELIMINATE UNNECESSARY INSPECTION TIME.
4. ALL CONCRETE MANHOLES SHOWN ON THE PLANS ARE 48 INCHES MINIMUM DIAMETER AND CONFORM TO CITY OF WEST LINN STANDARDS. MANHOLE EXTENSION RINGS SHALL BE LIMITED TO A MAXIMUM OF TWELVE INCHES TOTAL HEIGHT.
5. ALL P.V.C. SEWER PIPE SHALL CONFORM TO ASTM D3034, SDR35 SPECIFICATIONS AND SHALL BE CLEARLY MARKED AS SUCH.
6. PIPE BEDDING SHALL BE AS PER A.P.W.A. DIVISION III, SECTION 301.2.02 AND SHALL BE 3/4"-0" CRUSHED ROCK.
7. TRENCH BACKFILL SHALL BE "CLASS A" PER CITY OF WEST LINN STANDARDS ON ALL SEWER LINES OUTSIDE PUBLIC RIGHT-OF-WAYS OR OUTSIDE OF PAVED AREAS. TRENCH BACKFILL SHALL BE "CLASS B" PER CITY OF WEST LINN STANDARDS IN ALL PUBLIC RIGHT-OF-WAY OR PAVED AREAS IN THE PROJECT.
8. TRENCH BACKFILL COMPACTION SHALL BE AS PER A.P.W.A. DIVISION III, SECTION 301.3.07. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE THE REQUIRED COMPACTION.
9. CONTRACTOR SHALL PREPARE A PRINT FOR THE ENGINEER SHOWING AS-CONSTRUCTED DATA.
10. ALL SEWER LINES ARE TO BE AIR TESTED PER SECTION 400.0603 OF THE CITY OF WEST LINN STANDARDS. ALL MANHOLES THAT REQUIRE HYDROSTATIC TESTING SHALL BE TESTED IN ACCORDANCE WITH SECTION 400.0603 OF THE CITY OF WEST LINN STANDARDS.
11. ALL HOUSE SERVICE STUBOUTS TO BE A MINIMUM OF 3' INTO PROPERTY AND/OR BEYOND EASEMENT LINE AND TO BE MARKED (SANITARY SERVICE) WITH A 2" X 4" FOR FUTURE LOCATION. SERVICE STUBOUTS TO BE 4" DIAMETER PIPE.
12. ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE OTHER UTILITIES AS REQUIRED; SUCH ADJUSTMENTS SHALL BE REVIEWED BY U.S.A., AND APPROVED, PRIOR TO COMMENCING WORK.
13. ALL P.V.C. SEWER PIPE SHALL CONFORM TO ASTM D3034, SDR35 SPECIFICATIONS AND SHALL BE CLEARLY MARKED AS SUCH.
14. ALL MANHOLES LOCATED IN UNIMPROVED EASEMENTS SHALL BE WATERTIGHT AND PROVIDED WITH TAMPER-PROOF LIDS.

WATER SYSTEM NOTES:

1. NOTIFY CITY OF WEST LINN (656-4212) 48 HOURS PRIOR TO STARTING CONSTRUCTION TO SET UP A PRE-CONSTRUCTION MEETING.
2. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL COORDINATE WATERLINE INSTALLATION WITH OTHER UTILITIES.
3. ALL WORK AND MATERIALS SHALL COMPLY WITH CITY OF WEST LINN STANDARDS, THE OREGON STATE HEALTH DIVISION ADMINISTRATIVE RULES, CHAPTER 33, A.W.W.A. AND A.P.W.A. STANDARDS.
4. ALL WORK WILL BE INSPECTED AND APPROVED BY CITY OF WEST LINN.
5. ALL PIPE SHALL BE "TYTON JOINT," CLASS 52 DUCTILE IRON. ALL PIPE AND FITTINGS SHALL BE CEMENT LINED.
6. FIRE HYDRANT ASSEMBLY INCLUDES 8" MJ X 6" FLG TEE, 6" FLG X MJ GATE VALVE, 6" MJ X MJ HOLDING SPOOL, FIRE HYDRANT, 6" MJ, 5-1/4" MVO, 3 PORT (2 2-1/2" NST HOSE CONNECTIONS, 1 4-1/2" NST PUMPER CONNECTION), 1-1/2" OPERATING NUT, OPEN LEFT, YELLOW COLOR, RODDA #2202.
7. FIRE HYDRANT TO BE INSTALLED UPON A PREFORMED CONCRETE BLOCK WITH 1-1/2 CUBIC YARDS OF CRUSHED 1-1/2" DRAIN ROCK. ROCK TO BE COVERED WITH TAR PAPER TO SEPARATE IT FROM NATIVE BACKFILL.
8. ALL TEES, BENDS AND BLOW-OFF LOCATIONS TO HAVE A POURED-IN-PLACE CONCRETE THRUST BLOCK CONFORMING TO CHART SHOWN ON DETAIL SHEET.
9. ALL WATER MAINS TO HAVE A MINIMUM COVER OF 36" FROM FINISH GRADE.
10. PIPE BEDDING SHALL BE AS PER A.P.W.A. DIVISION III, SECTION 301.2.02 AND SHALL BE 3/4"-0" CRUSHED ROCK.
11. TRENCH BACKFILL SHALL BE "CLASS B" PER CITY OF WEST LINN STANDARDS IN ALL PUBLIC RIGHT-OF-WAYS OR PAVED AREAS IN THE PROJECT.
12. ALL SANITARY SEWER LINES WITHIN 10' LATERALLY OR 3' VERTICALLY OF WATER MAIN TO BE ENCASED IN CONCRETE.
13. ANY CROSSING OF WATER MAIN BY SANITARY SEWER SHALL BE MADE AT APPROXIMATELY 90° AND HAVE 18" OF VERTICAL CLEARANCE.
14. ALL MAINS TO BE TESTED PER CITY OF WEST LINN STANDARDS.
15. ALL COPPER SERVICES TO BE INSTALLED BY THE CONTRACTOR PRIOR TO PROOF ROLL OF SUBGRADE.
16. ALL MAINS SHALL BE CLEANED AND FLUSHED WITH POTABLE WATER PRIOR TO DISINFECTION AND BACTERIOLOGICAL TESTING IN ACCORDANCE WITH A.W.W.A. STANDARDS C601. AND PRIOR TO CONNECTION TO THE CITY WATER SYSTEM.

BENCHMARKS:

1. TBM #1 - PK NAIL IN PAVEMENT APPROX STA. 1+75 SUNCREST ROAD ELEV. 680.34.
2. TBM #13 - PK NAIL IN PAVEMENT WEST SIDE OF SUNCREST ROAD APPROX STA. 4 + 35. ELEV. 671.93
3. SANITARY SEWER MANHOLE 30-16-1-2 - MARYLHURST HEIGHTS NO. 3. ELEV. 551.91.

VICINITY MAP

NTS

SHEET INDEX

1. COVER SHEET & INDEX
2. STREET & STORM IMPROVEMENTS - PLAN
3. STREET & STORM IMPROVEMENTS - PROFILES RIDGEBROOK DRIVE & PARKVIEW COURT
4. SUNCREST ROAD STREET & STORM IMPROVEMENTS - PLAN & PROFILE
5. STORM SEWER IMPROVEMENTS - PROFILES "D", "D2", & "E"
6. SANITARY SEWER IMPROVMENTS - PLAN
7. SANITARY SEWER IMPROVEMENTS - PROFILES "A", "B", "C", "C1", "C2", "C3", & "C4"
8. WATER SYSTEM IMPROVEMENTS - PLAN
9. GRADING & EROSION CONTROL PLAN
10. DETAILS
11. DETAILS

REGISTERED PROFESSIONAL ENGINEER 10,538 OREGON JULY 13, 1979 R GREGG WESTON

REVISIONS

NO.	BY	DATE	DESCRIPTION
5	SRG	2.2.94	AS-BUILT REVISIONS
4	PBB	5.2.92	REV PER CITY OF WEST LINN
3	IRO	4.9.92	REV. ST. SEWER SYSTEM
2	IRO	3.30.92	CHANGE NAME/ADD NOTES
1	IRO	3.12.92	GENERAL REVISIONS

Designed RWK
Drawn IRO
Checked
Approved
Date 8.19.91
Scale N.T.S.

KAMPE ASSOCIATES INC
CIVIL ENGINEERS
LAND SURVEYORS
3681 S.W. CARMAN DRIVE
LAKE OSWEGO, OREGON 97035
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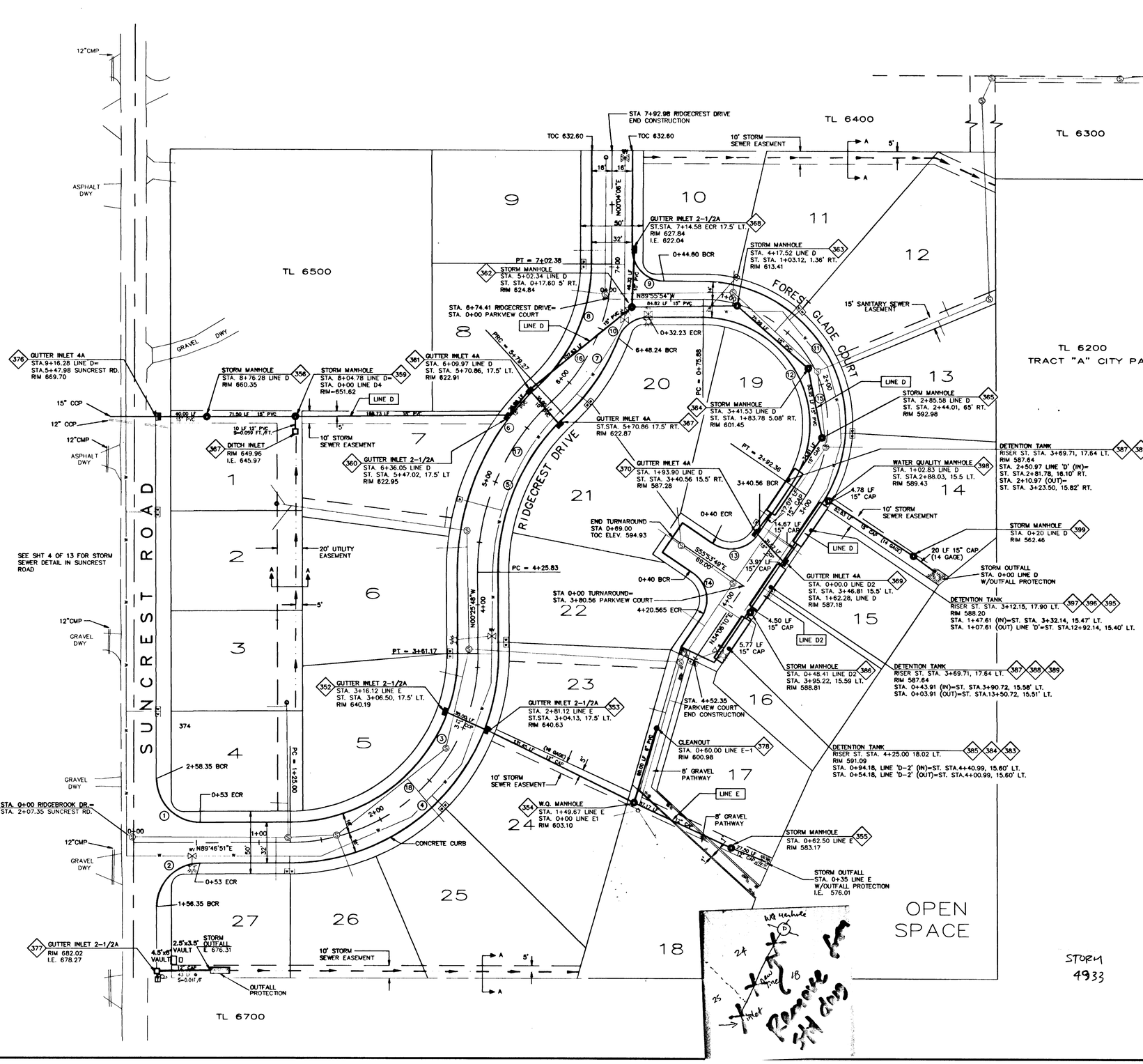
PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

RIDGEBROOK PARK SUBDIVISION
COVER SHEET & INDEX

AS-BUILT



CURB RETURN ELEVATIONS

①	BCR. 2+58.35	00°00'00"	678.84
	1/4	22°30'00"	679.04
	1/2	45°00'00"	678.67
	3/4	67°30'00"	677.68
	ECR. 0+53	90°00'00"	675.80
②	BCR.1+56.35	00°00'00"	681.16
	1/4	22°30'00"	680.51
	1/2	45°00'00"	679.49
	3/4	67°30'00"	677.96
	ECR. 0+53	90°00'00"	676.14
⑨	BCR. 0+44.60	00°00'00"	622.51
	1/4	22°30'00"	624.03
	1/2	45°00'00"	625.56
	3/4	67°30'00"	626.93
	ECR. 7+14.58	90°00'00"	627.80
⑩	BCR. 6+48.24	00°00'00"	624.27
	1/4	22°30'00"	624.58
	1/2	45°00'00"	624.86
	3/4	67°30'00"	624.78
	ECR. 0+32.23	90°00'00"	624.21
⑬	BCR. 3+40.56	00°00'00"	587.32
	1/4	22°30'00"	587.45
	1/2	45°00'00"	587.98
	3/4	67°30'00"	588.92
	ECR. 0+40	90°00'00"	590.26
⑭	BCR. 0+40	00°00'00"	590.86
	1/4	22°30'00"	589.70
	1/2	45°00'00"	589.27
	3/4	67°30'00"	589.58
	ECR. 4+20.56	90°00'00"	590.36

CURB RETURN/CL CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	DELTA
1	35.00'	54.98'	35.00'	90°00'00"
2	35.00'	54.98'	35.00'	90°00'00"
3	134.00'	210.98'	134.49'	90°12'39"
4	166.00'	261.36'	166.61'	90°12'39"
5	169.00'	140.17'	74.40'	47°31'19"
6	201.00'	166.71'	88.49'	47°31'19"
7	166.00'	76.32'	38.85'	26°20'36"
8	134.00'	109.98'	58.30'	47°01'24"
9	26.00'	40.84'	26.00'	90°00'00"
10	26.00'	31.46'	17.98'	69°19'11"
11	114.00'	246.79'	214.56'	124°02'04"
12	86.00'	186.17'	161.86'	124°02'04"
13	26.00'	40.84'	26.00'	90°00'01"
14	26.00'	40.84'	26.00'	89°59'59"
15	100.00'	216.48'	188.21'	124°02'04"
16	150.00'	173.11'	65.26'	47°01'24"
17	185.00'	153.44'	81.44'	47°31'19"
18	150.00'	236.17'	150.55'	90°12'39"

NO	BY	DATE	DESCRIPTION
6	JAN	2/10/94	REV. AS-BUILT
5	IRO	7/27/92	REV. PER SYTEM
4	IRO	6/4/92	REV. PER ENGINEER
3	IRO	4/9/92	REV. ST. SEWER SYSTEM
2	IRO	3/30/92	REV. ST. SEWER/ST. NAMES & SHT. NOS.
1	IRO	3/12/92	GENERAL REVISIONS

REVISIONS

Designed R.W.K.
Drawn J.A.N.
Checked
Approved
Date 1-25-93
Scale 1"=40'

KAMPE ASSOCIATES
PLANNING & ENGINEERING
CIVIL ENGINEERING
LAND SURVEYING
300 S.W. COLLINS WAY
LAKE OSWEGO, OREGON 97035
(503) 635-6591 FAX (503) 635-5488

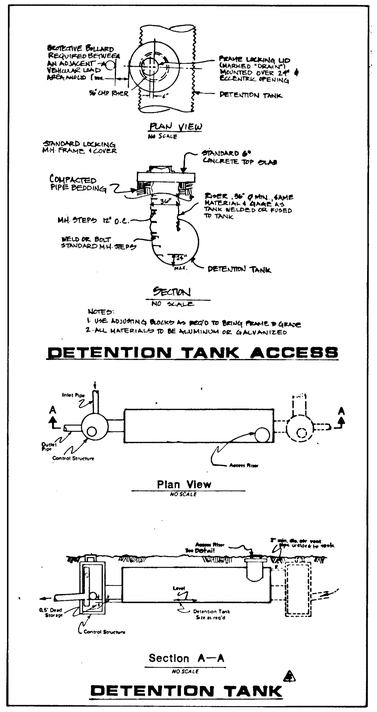
PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

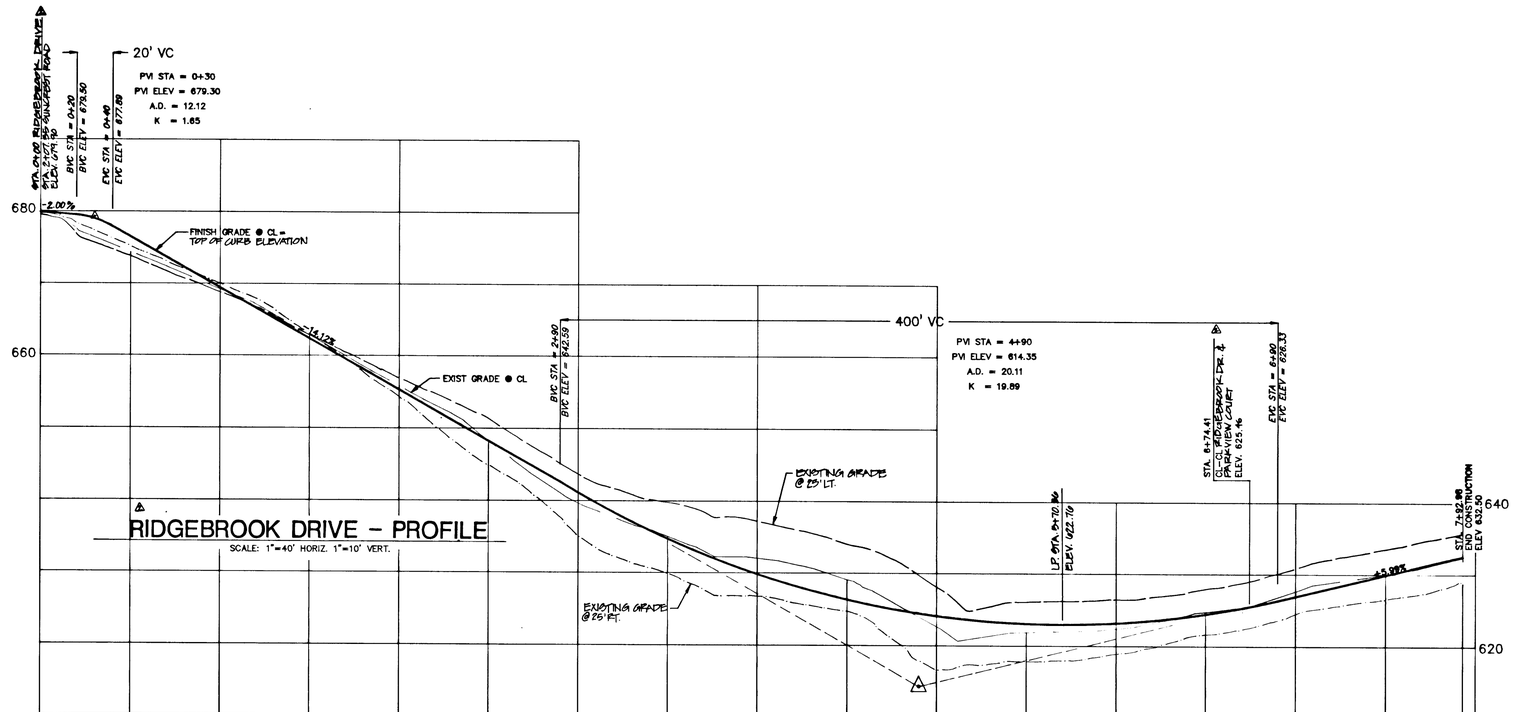
RIDGEBROOK PARK SUBDIVISION
STREET & STORM IMPROVEMENTS PLAN

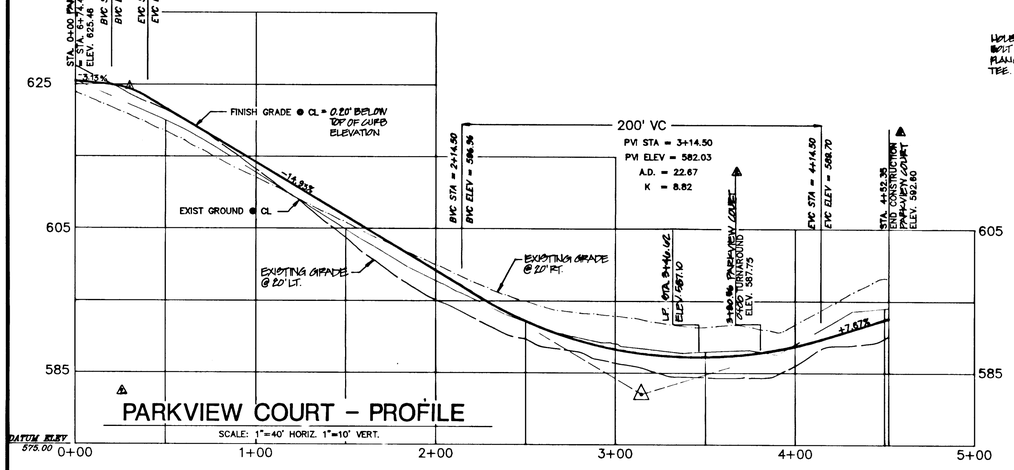
2 / 11

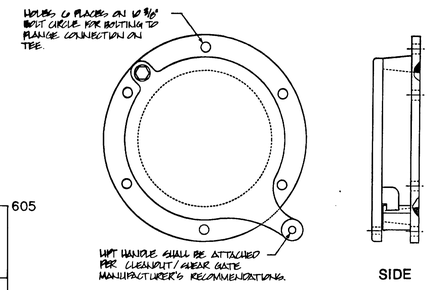
90-180

AS-BUILT





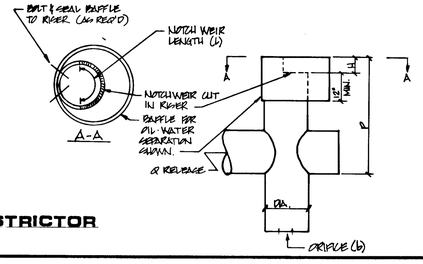




CLEANOUT/SHEAR GATE

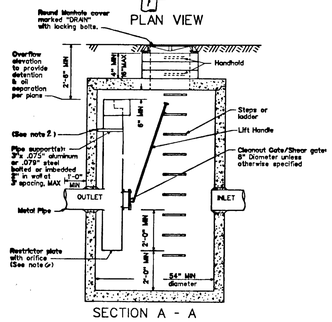
NOTES

1. Except as shown or noted, units shall be constructed in accordance with the requirements for special oversized manhole, 54" minimum diameter.
2. ⅝" diameter stainless steel expansion bolts
3. The restrictor/separator and pipe supports shall be of the same material and shall be fabricated from .050" aluminum or .064 aluminized steel or .064" galvanized steel pipe in accordance with AASHTO M 36, M 196, M 197 and M 274. Galvanized steel shall have treatment 1.
4. Outlet shall be connected to culvert or sewer pipe with a standard coupling band for corrugated metal pipe or grouted into the bell of concrete pipe.
5. Frame and ladder or steps to be offset as shown:
   A. Cleanout gate is visible from top.
   B. Climb-down space is clear of riser and cleanout gate.
   C. Frame is clear of curb (if any exists).
6. Restrictor plate with orifice as specified. Specified opening to be cut round and smooth.
7. Cleanout gate/Shear gate
   Aluminum alloy per ASTM B-26-2C-32a or cast iron ASTM A48 Class 30B as required.
   Lift Handle either solid or tubing with adjustable hook as required.
   Neoprene rubber gaskets required between flanges.



STRUCTURE	BAFFLE	P	H	ORIFICE (d)	DIA.	L
3SA	15'	3.0'	6"	1.67"	10"	110'
3AB	16'	8.5'	1'-0"	0.54"	12"	093'

FLOW RESTRICTOR



WATER QUALITY MANHOLE

D:\PROJECT\P\80180\PLAT.DWG

AS-BUILT

NO.	BY	DATE	DESCRIPTION
4	SRG	12.8.94	AS BUILT REVISIONS
3	LRG	7.27.92	REVISIONS
2	LRG	5.20.92	REVISIONS & SHT. NO.
1	LRG	3.12.92	GENERAL REVISIONS

Designed FMW
Drawn LRG
Checked
Approved
Date 8-19-91
Scale AS SHOWN

KAMPE ASSOCIATES
CIVIL ENGINEERS
LAND SURVEYORS
3491 S.W. CARMAN DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-6291

PREPARED FOR:
MR. KENT ZIEGLER
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18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

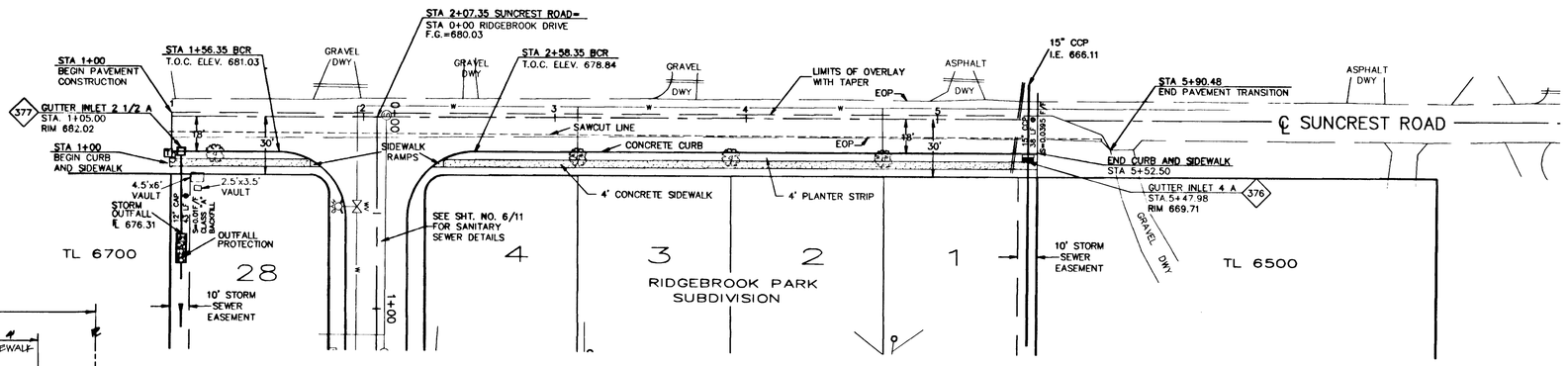
RIDGEBROOK PARK
SUBDIVISION
STREET IMPROVEMENTS
PROFILES

REGISTERED PROFESSIONAL ENGINEER
10,538
OREGON
JULY 13, 1976
R. GREGG WESTON

3/11
80-180

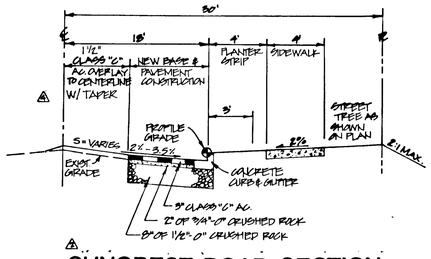
GRAPHIC SCALE

1 inch = 40 ft.



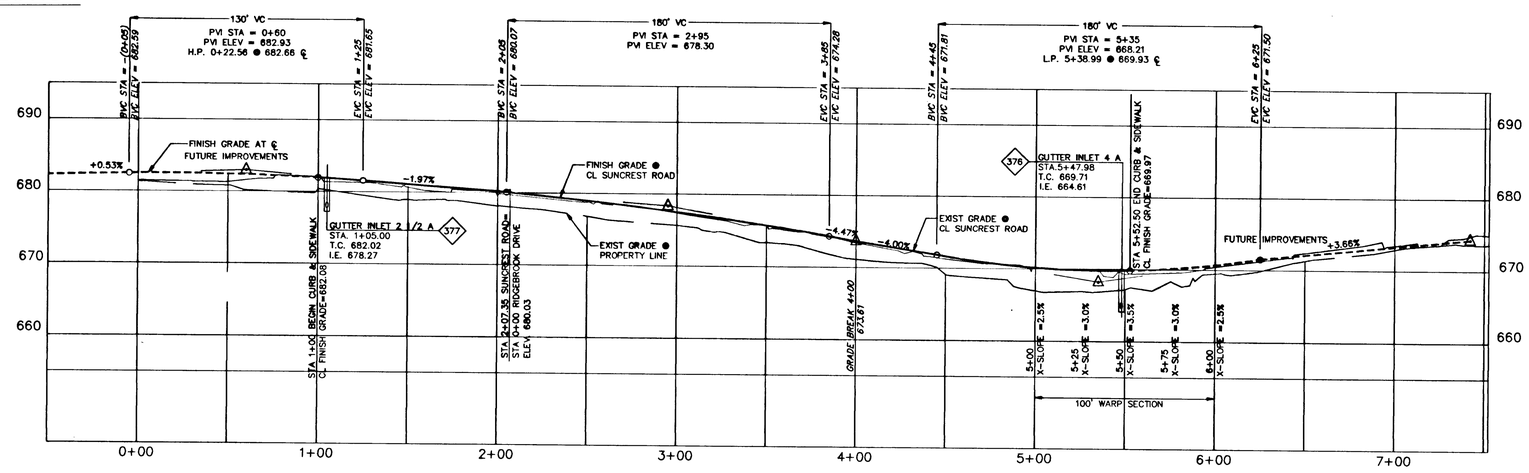
SUNCREST ROAD – PLAN

STORM
4931



SUNCREST ROAD SECTION

NTS



SUNCREST ROAD – PROFILE

SCALE: 1"=40' HORIZ. 1"=10' VERT.

NO	BY	DATE	DESCRIPTION
6	JAN	1/26/94	REV. AS-BUILT
5	IRO	7/27/93	REV. PER SYSTEM
4	IRO	6/4/92	REV. PER ENGINEER
3	IRO	4/9/92	REV. ST. SEWER SYSTEM
2	IRO	3/30/92	REV. ST. SEWER/ST. NAMES & SHT. NOS.
1	IRO	3/12/92	GENERAL REVISIONS

REVISIONS

Designed R.W.K.
Drawn J.A.M.
Checked
Approved
Date 1-25-93
Scale 1"=40'

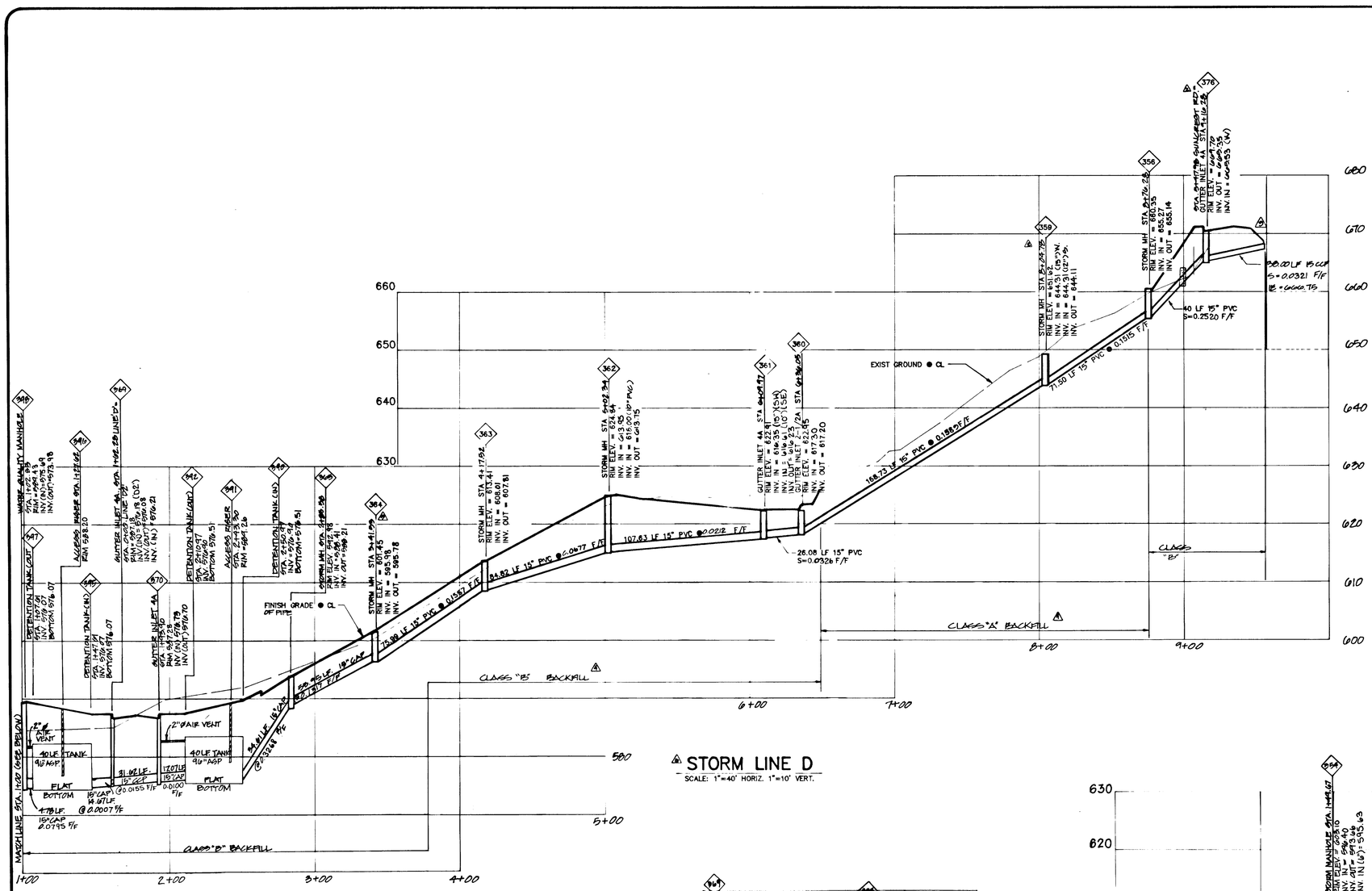
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
KAMPE ASSOCIATES, Inc.
220 HOUSE PARK BUILDING
2300 S.W. COLLINS WAY
LAKE OSWEGO, OREGON 97035
(503) 635-3571 FAX (503) 635-1660

PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

RIDGEBROOK PARK SUBDIVISION
SUNCREST ROAD STREET & STORM IMPROVEMENTS PLAN

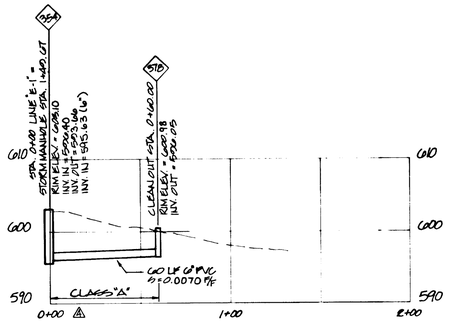
4/11 90-180

AS-BUILT



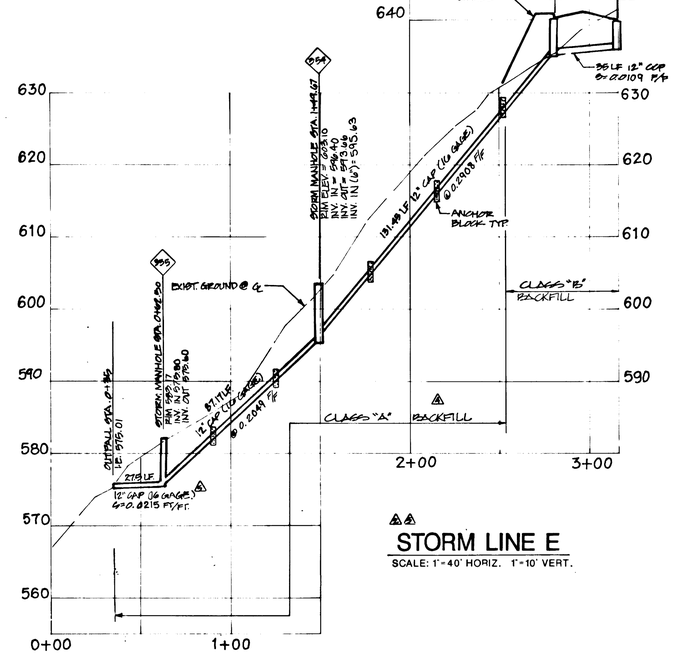
STORM LINE D

SCALE: 1"=40' HORIZ. 1"=10' VERT.



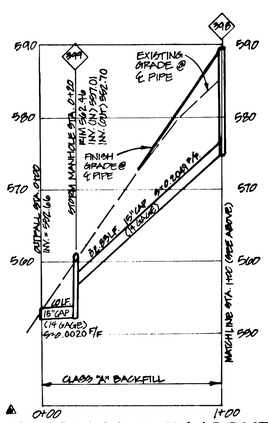
STORM LINE E-1

SCALE: 1" = 40' HORIZ. 1" = 10' VERT.



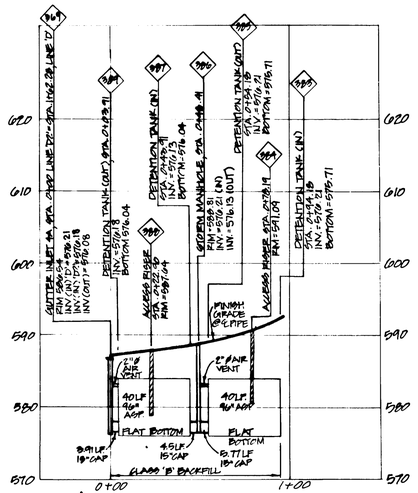
STORM LINE E

SCALE: 1"=40' HORIZ. 1"=10' VERT.



STORM LINE 'D' (CONT.)

SCALE: 1"=40'HORIZ./1"=10'VERT.



STORM LINE D-2

SCALE: 1"=40'HORIZ./1"=10'VERT.

D:\PROJECT\P\901801\STORM.DWG SHT5

AS-BUILT

NO.	BY	DATE	DESCRIPTION
5	SRK	2.10.94	AS-BUILT REVISIONS
4	RD	7.27.92	REV. PER CITY
3	RD	6.4.92	REV. PER ENGINEER
2	PBB	5.21.92	REV. PER CITY OF WEST LINN
1	PBB	4.30.92	REV. MANHOLE ELEVATIONS AND PROFILE E
0	RD	9.30.91	REV. ST. SEWER & DRT MARKERS
0	RD	9.12.91	GENERAL REVISIONS

REVISIONS

Designed RWK
Drawn RD
Checked
Approved
Date 8-15-91
Scale AS SHOWN

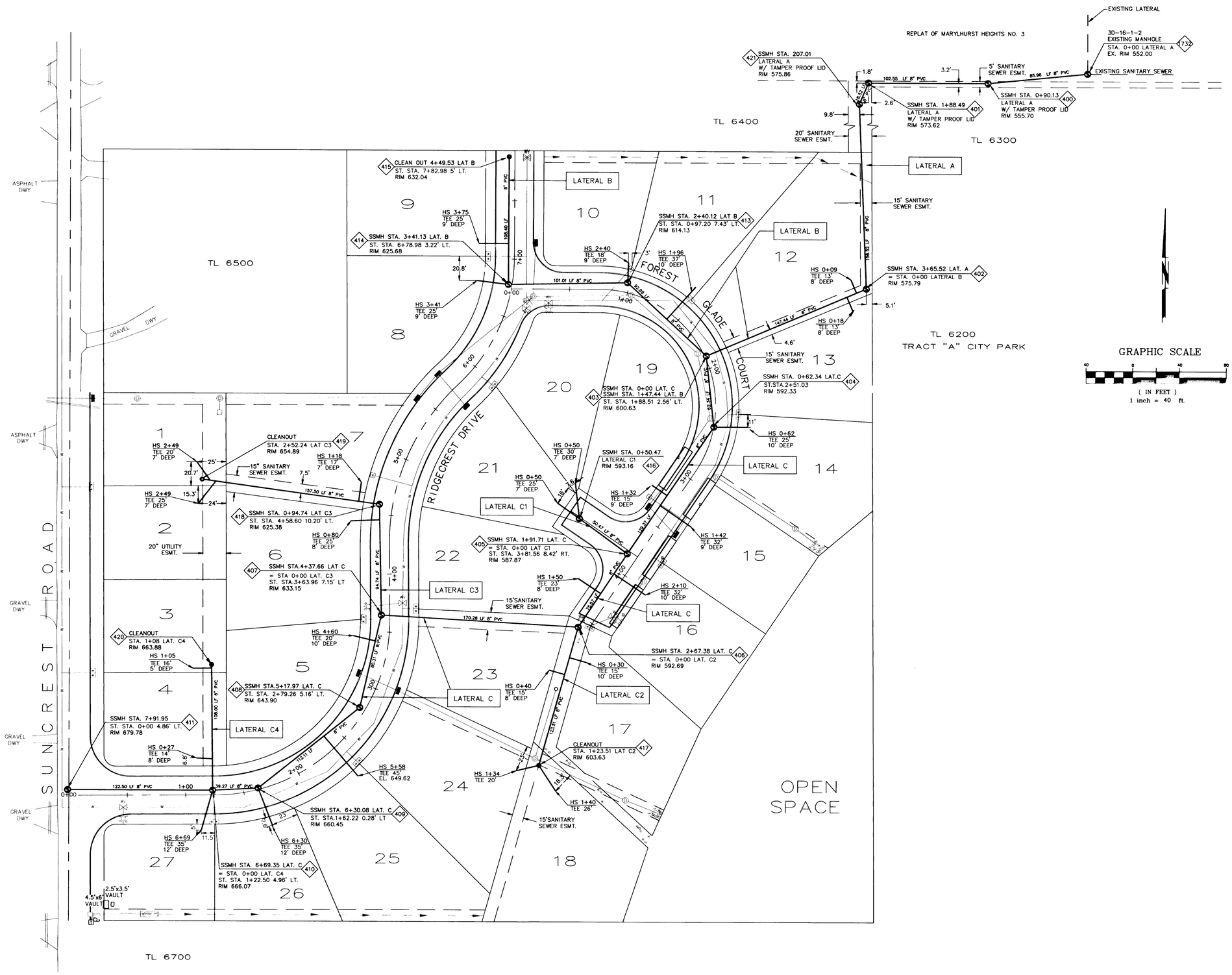
KAMPE ASSOCIATES INC
CIVIL ENGINEERS
LAND SURVEYORS
3681 S.W. CARMAN DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-6291

PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

RIDGEBROOK PARK
SUBDIVISION
STORM SEWER
IMPROVEMENTS
PROFILES

5/11
90-180

REGISTERED PROFESSIONAL ENGINEER
10538
OREGON
JULY 13, 1979
R. GIEGG WESTON



AS-BUILT

NO.	BY	DATE	DESCRIPTION
7	JRV	7/7/94	REV. AS-BUILT
6	JAN	1/26/94	REV. AS-BUILT
5	IRO	7/27/92	REV. PER SYSTEM
4	IRO	6/4/92	REV. PER ENGINEER
3	IRO	4/9/92	REV. ST. SEWER SYSTEM
2	IRO	3/30/92	REV. ST. SEWER/ST. NAMES & SHT. NOS.
1	IRO	3/12/92	GENERAL REVISIONS

REVISIONS

Designed R.W.K.
Drawn J.A.N.
Checked
Approved
Date 2-8-94
Scale 1"=40'

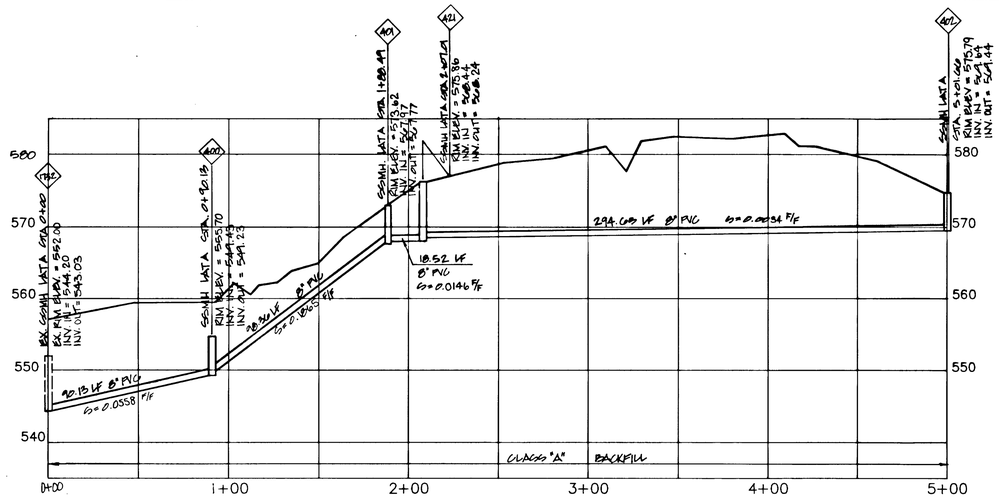
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
KAMPE ASSOCIATES P.C.
209 KRUSE PARK BUILDING
2500 S.W. 1ST AVENUE
LAKE OSWEGO, OREGON 97035
(503) 635-6591 FAX (503) 635-3480

PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

RIDGEBROOK PARK SUBDIVISION
SANITARY SEWER
IMPROVEMENTS PLAN

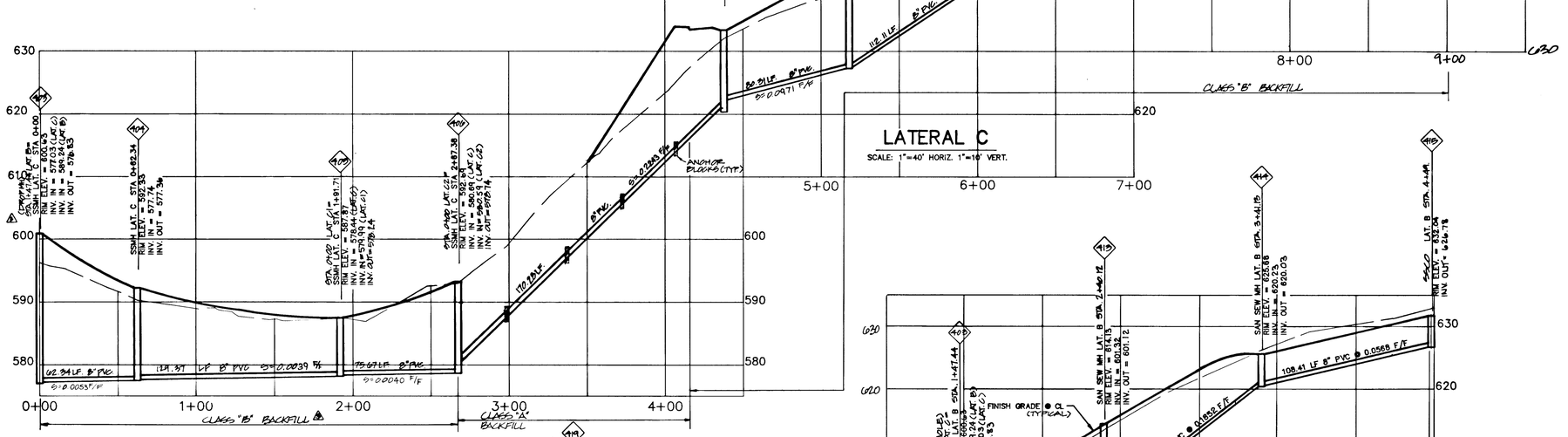
6
11
90-180

9318DAB6.DWG JAN 01-21-94



LATERAL A

SCALE: 1"=40' HORIZ. 1"=10' VERT.

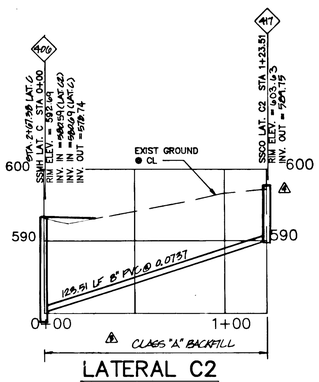


LATERAL C1

SCALE: 1"=40' HORIZ. 1"=10' VERT.

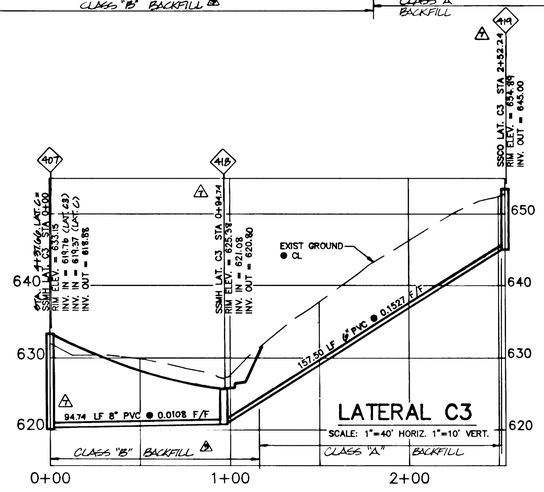
LATERAL C

SCALE: 1"=40' HORIZ. 1"=10' VERT.



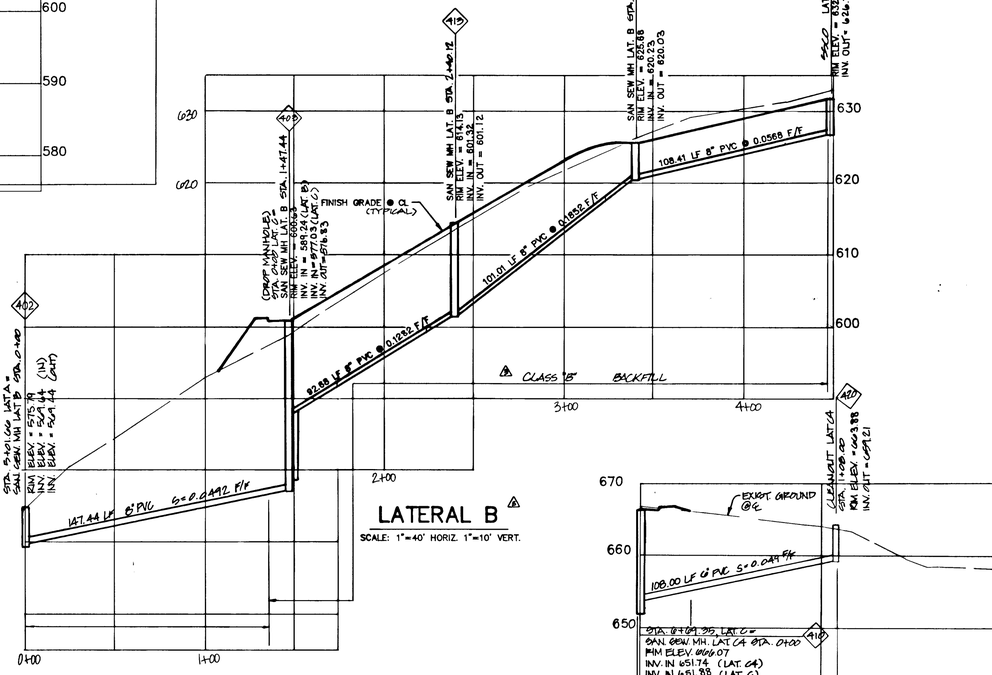
LATERAL C2

SCALE: 1"=40' HORIZ. 1"=10' VERT.



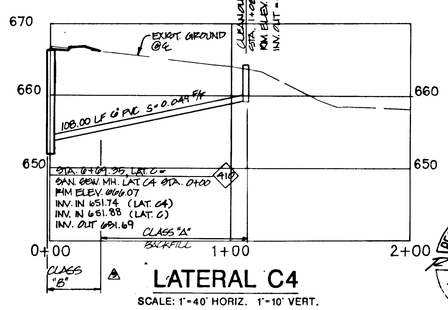
LATERAL C3

SCALE: 1"=40' HORIZ. 1"=10' VERT.



LATERAL B

SCALE: 1"=40' HORIZ. 1"=10' VERT.



LATERAL C4

SCALE: 1"=40' HORIZ. 1"=10' VERT.

NO.	BY	DATE	DESCRIPTION
1	JFN	3-7-94	AS-BUILT REVISIONS
2	SRS	2-10-94	AS-BUILT REVISIONS
3	PMS	1-30-92	REV. PER BACKPAT INFORMATION
4	PMS	10-2-91	REV. PER BONNIEVIEW WEST LAN
5	JEG	9-30-91	REV. PER CITY COMMENTS
6	JEG	7-26-91	REV. UNIT NAME & NO.
7	JEG	5-12-91	GENERAL REVISIONS

REVISIONS

Designed PMS
Drawn PM-W/JEG
Checked
Approved
Date 5-9-91
Scale As Shown

KAMPE ASSOCIATES INC
CIVIL ENGINEERS
LAND SURVEYORS
3681 S.W. JEAN DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-4291

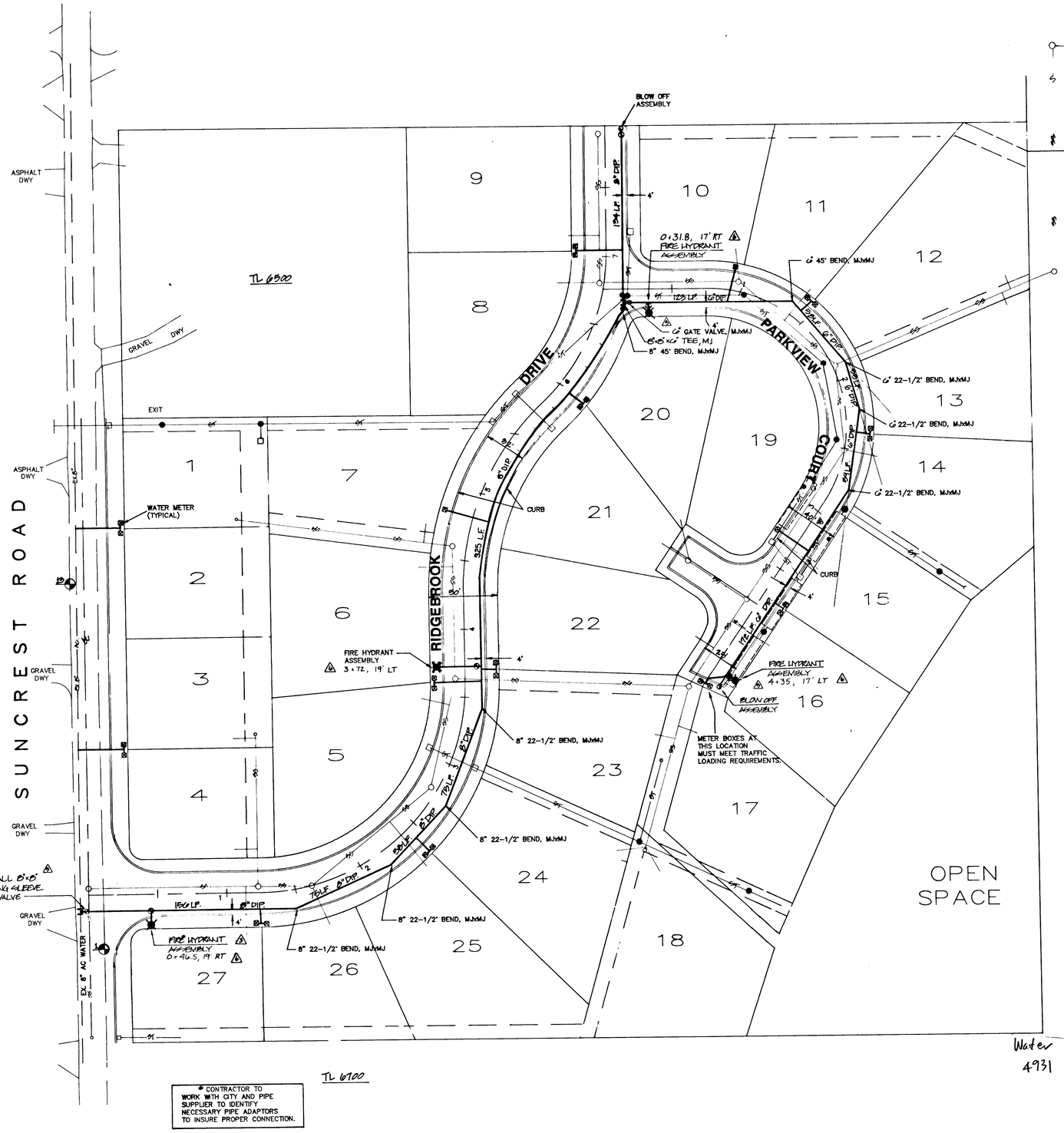
PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

RIDGEBROOK PARK
SUBDIVISION
SANITARY SEWER
IMPROVEMENTS
PROFILES

REGISTERED PROFESSIONAL ENGINEER
10,538
OREGON
JULY 13, 1979
R. GREGG WESTON

7/11
90-180

AS-BUILT



GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

LEGEND

- GATE VALVE
- BLOW-OFF ASSEMBLY
- TEE
- WATER METER

MATERIALS LIST

6" DUCTILE IRON PIPE	447 LF
8" DUCTILE IRON PIPE	823 LF
6" GATE VALVE	1
8" GATE VALVE	4
8"x6" TEE	1
8" 45° BEND	1
8" 22-1/2° BEND	3
6" 45° BEND	1
6" 22-1/2° BEND	5
FIRE HYDRANT ASSEMBLY (COMPLETE FROM MAIN)	4
BLOW-OFF ASSEMBLY	2
DOUBLE SERVICE	12
SINGLE SERVICE	5

* CONTRACTOR TO WORK WITH CITY AND PIPE SUPPLIER TO IDENTIFY NECESSARY PIPE ADAPTORS TO INSURE PROPER CONNECTION.

Water
4931

D:\PROJECT\P\90180\WATERPL

AS-BUILT

NO.	BY	DATE	DESCRIPTION
1	JRH	3.8.94	AS BUILT REVISIONS
2	JRH	3.8.94	AS BUILT REVISIONS
3	JRH	2.17.95	REV. ALIGNMENT PER CITY
4	JRH	5.2.95	REV. PER CITY OF WEST LINN
5	JRH	5.30.95	REV. PER SEWER, SHT NOS & STR. NAMES
6	JRH	8.12.96	GENERAL REVISIONS

REVISIONS

Designed RWF
Drawn IRD
Checked
Approved
Date 8-19-91
Scale 1"=40'

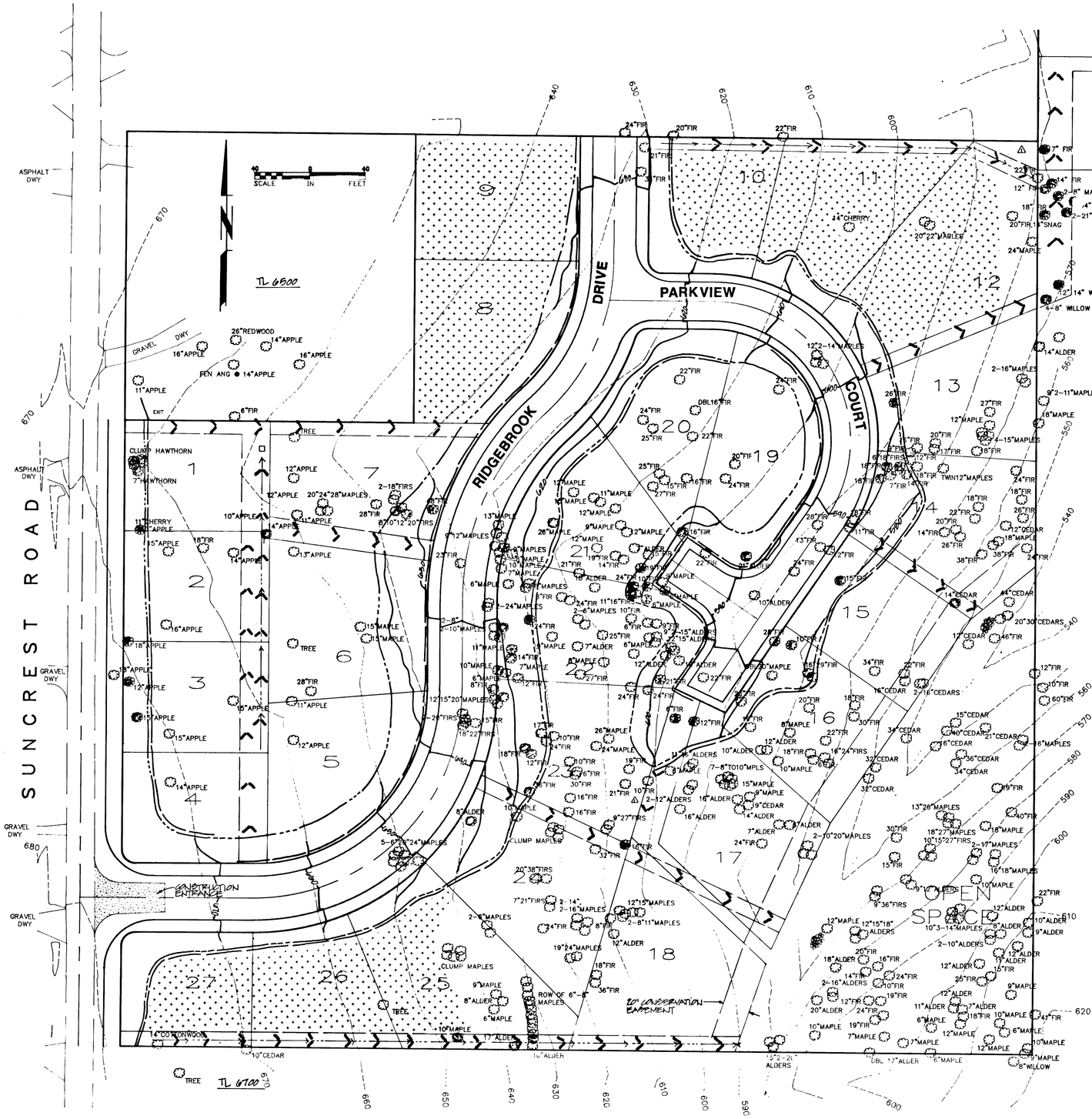
KAMPE ASSOCIATES INC.
CIVIL ENGINEERS
LAND SURVEYORS
3665 KAMMAN DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-6291

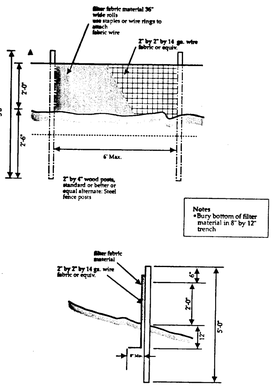
PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

RIDGEBROOK PARK SUBDIVISION
WATER SYSTEM IMPROVEMENTS PLAN

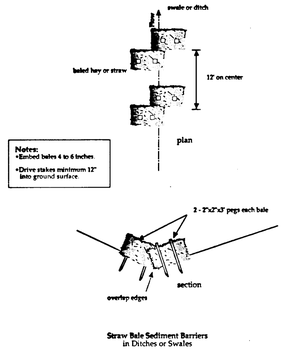
8/11
90-180

REGISTERED PROFESSIONAL ENGINEER
10,538
OREGON
JULY 13, 1979
R. GREGG WESTON

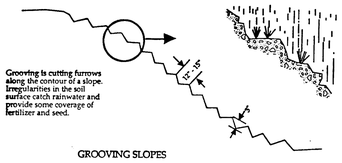




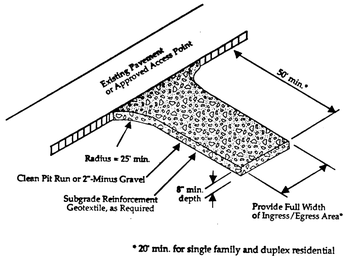
SEDIMENT FENCE
NTS



STRAW BALE DETAIL
NTS



SLOPE PROTECTION
NTS



* 20' min. for single family and duplex residential

CONSTRUCTION ENTRANCE
NTS

CONSTRUCTION SCHEDULE:

BEGIN: APRIL 1992
END: JULY 1992
* ALL TREES NOT TO BE DISTURBED ARE TO BE CORDONED OFF WITH TEMPORARY FENCING.

LEGEND

- TREE TO BE REMOVED DUE TO GRADING/UTILITY CONSTRUCTION.
- GRADING LIMITS
- SEDIMENT FENCE PLACEMENT
- STRAW BALE PLACEMENT
- SEED/MULCH AREA
- RIP-RAP OUTLET PROTECTION
- 12" SOD PLACEMENT AREA

SEEDING/MULCHING NOTES:

1. ALL AREAS DISTURBED DURING CONSTRUCTION TO BE GRADED TO DRAIN AND COMPACTED TO A MINIMUM OF 90% OF AASHTO T99 IMMEDIATELY AFTER INSTALLATION OF UTILITIES OR GRADING OF RIGHT-OF-WAY.
2. RECOMMENDED SEED MIXTURE:

TYPE	PERCENT BY WEIGHT
ELKA DWARF PERENNIAL RYEGRASS	80
CREEPING RED FESCUE	20

APPLICATION RATE: 100 POUNDS MINIMUM PER ACRE

3. FERTILIZER SHALL BE 12-16-8 WITH 50% OF THE NITROGEN DERIVED FROM UREA-FORMALDEHYDE, AND APPLIED AT A RATE OF 400 POUNDS PER ACRE.
4. SEED AND MULCH AT A RATE OF 2,000 LB/AC WITH HEAVY BONDING AGENT OR NETTING AND ANCHORS. MULCH SHALL BE A WOOD CELLULOSE FIBER OR OTHER MATERIAL SUITABLE FOR HYDROMULCHING.
5. SEEDING AND MULCHING TO TAKE PLACE IN ALL CUT AND FILL AREAS OUTSIDE OF ROAD AREA.

REGISTERED PROFESSIONAL ENGINEER 10,538 OREGON JULY 13, 1979 R. GREGG WESTON

AS-BUILT

NO.	BY	DATE	DESCRIPTION
1	SRG	2.2.94	AS-BUILT REVISIONS
2	PEB	5.2.92	REV. PER CITY OF WEST LINN
3	IRO	4.9.92	REV. ST. DEWEY SYSTEM

REVISIONS

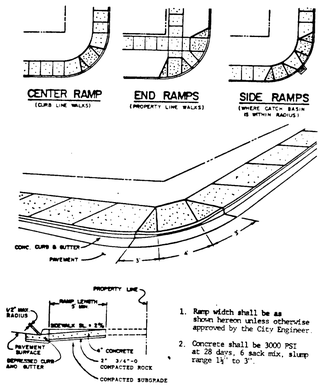
Designed RWK
Drawn IRO
Checked
Approved
Date 3.30.92
Scale AS SHOWN

KAMPE ASSOCIATES INC
CIVIL ENGINEERS
LAND SURVEYORS
3681 S.W. CARMAN DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-6291

PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREGON 97034

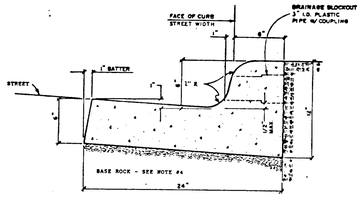
RIDGEBROOK PARK SUBDIVISION
GRADING & EROSION CONTROL PLAN

9/11
90-180



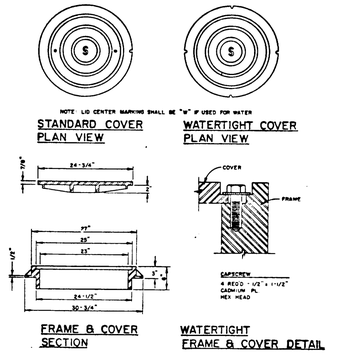
1. Ramp width shall be as shown hereon unless otherwise approved by the City Engineer.
2. Concrete shall be 3000 PSI at 28 days, 6 sack mix, slump range 1½" to 3".

SIDEWALK RAMP

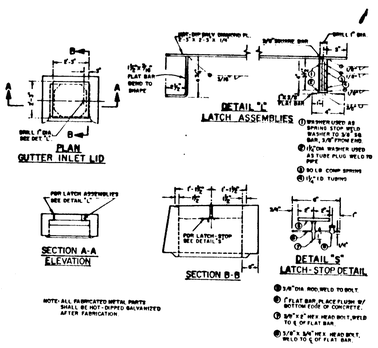


1. When used along medians, gutters may be reduced with prior approval from the City Engineer.
2. Concrete shall have a breaking strength of 3000 PSI after 28 days.
3. CONTRACTION JOINTS
   A. To be provided:
      1) at each point of tangency of the curb.
      2) at each cold joint.
      3) at each 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.

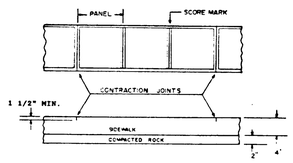
CURB & GUTTER



MANHOLE FRAME & COVER



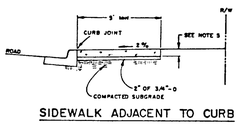
GUTTER INLET COVER



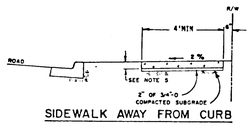
NOTES

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, WHEEL-CHAIR 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.

SIDEWALK JOINT



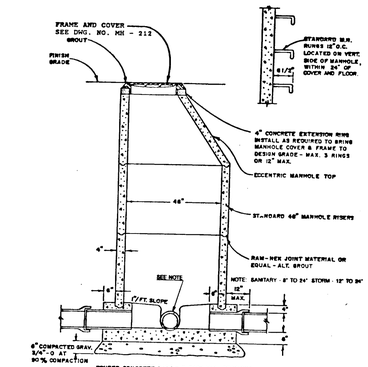
SIDEWALK ADJACENT TO CURB



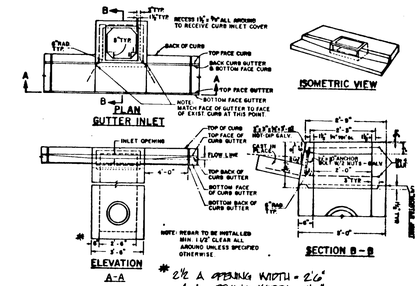
SIDEWALK AWAY FROM CURB

1. Concrete shall be 3000 PSI at 28 days, 6 sack min, 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 countable 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" min. plastic pipe at a 1% slope. A contraction joint shall be placed over the pipe.

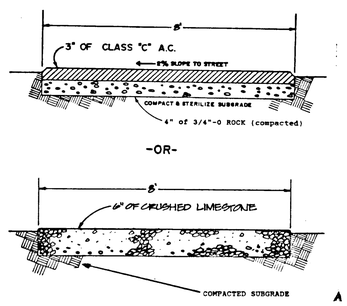
CONCRETE SIDEWALK



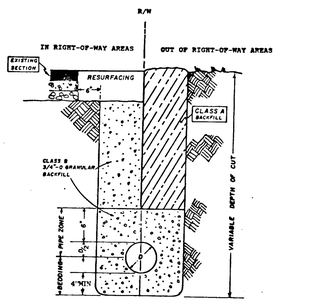
STANDARD MANHOLE



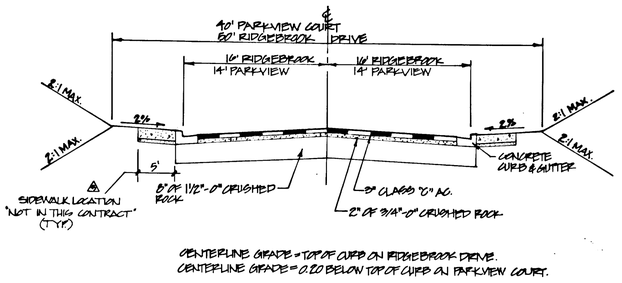
GUTTER INLET 2 1/2A



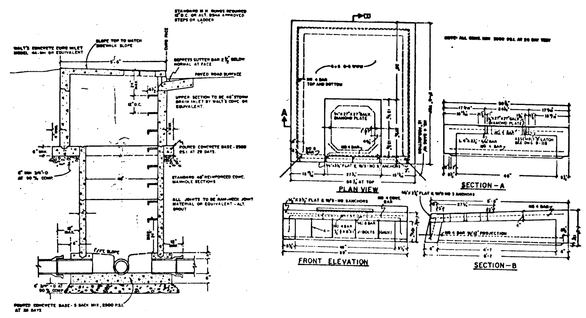
PEDESTRIAN PATH



PIPE BEDDING & BACKFILL



TYPICAL STREET SECTION



GUTTER INLET 4A (MODIFIED)

NO.	BY	DATE	DESCRIPTION
			REVISIONS
A	DSG	2-2-94	AS-BUILT REVISIONS
A	PBS	5-2-94	REV. PER CITY OF WEST LINN
A	DSG	8-26-96	REV. PART NO. / ADD TYP. SECTION
A	DSG	9-12-96	GENERAL REVISIONS

Designed
Drawn JEO
Checked
Approved
Date 8-19-91
Scale NTS

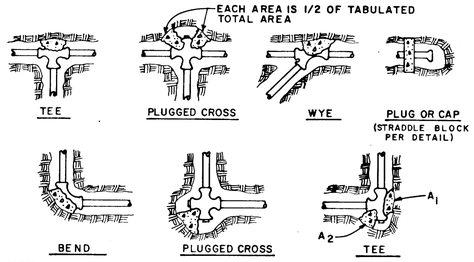
KAMPE ASSOCIATES, INC.
CIVIL ENGINEERS
LAND SURVEYORS
3861 S.W. CORMORANT DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-6291

PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
LAKE OSWEGO, OREG N 97034

RIDGEBROOK PARK SUBDIVISION
DETAILS

10/11
90-180

AS-BUILT

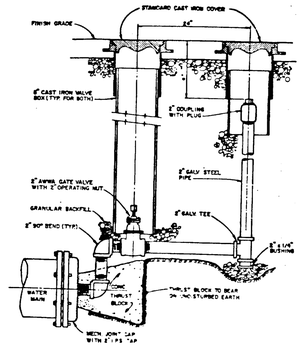


NOTES:

1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
3. IF NOT SHOWN ON PLANS, REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED BELOW, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PROCEDURE (S) AND ALLOWABLE SOIL BEARING STRESS (ES) STATED THE SPECIAL SPECIFICATIONS.
4. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.
5. BUILDING PAPER OR VISQUINE SHALL BE PLACED BETWEEN CONCRETE AND FITTINGS.
6. ALL POURED IN PLACE CONCRETE SHALL HAVE A (28) DAY STRENGTH OF 3,000 P.S.I. AND 2" TO 4" SLUMP.
7. BELOW BEARING AREAS BASED ON TEST PRESSURE OF 150 P.S.I. AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE / 150) X (2,000 / SOIL BEARING STRESS) X (TABLE VALUE). BEARING AREAS IN SQUARE FEET.

FITTING SIZE (IN.)	TEE, WYE, PLUG OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN A_1	TEE PLUGGED ON RUN A_2	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1.0	1.4	1.9	1.4	1.0	—	—
6	2.0	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	4.6	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	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8

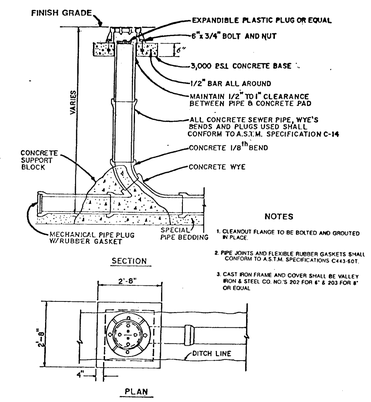
THRUST BLOCKING



NOTES

1. Blowoff not to be located in gutter or ditch.
2. Fittings and pipe between main & 2" gate valve shall be brass
3. Coat all galvanized pipe or exposed steel with protective coating conforming to AWWA C 203.
4. Restrain mechanical joint plug to pipe.
5. This standard applicable for pipe sizes thru 8".

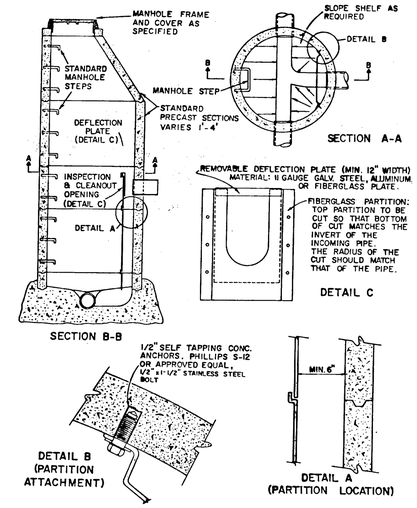
BLOW-OFF ASSEMBLY



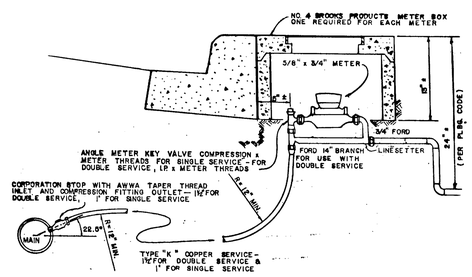
NOTES

1. CLEANOUT FLANGE TO BE BOLTED AND GROUTED IN PLACE.
2. PIPE JOINTS AND FLEXIBLE RUBBER GASKETS SHALL CONFORM TO A.S.T.M. SPECIFICATIONS C443-80T.
3. CAST IRON FRAME AND COVER SHALL BE VALLEY IRON & STEEL CO. NO.'S 202 FOR 6" & 203 FOR 8" OR EQUAL

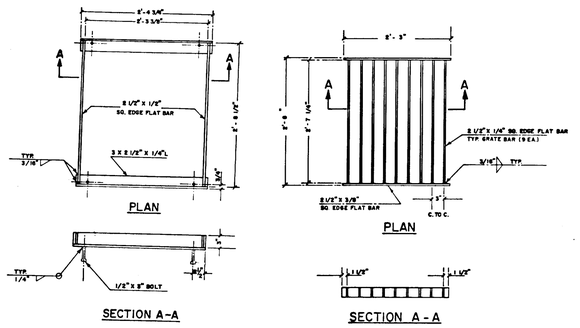
SANITARY SEWER CLEANOUT



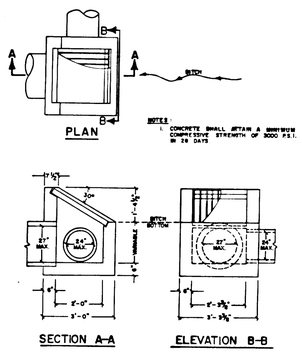
⚠ DROP MANHOLE DETAIL



TYPICAL WATER SERVICE INSTALLATION ⚠



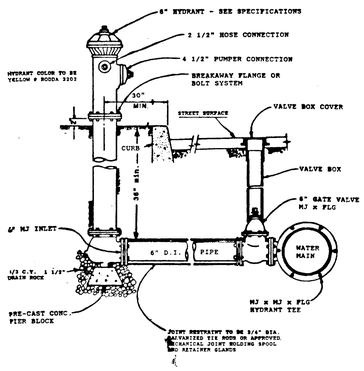
⚠ DITCH INLET FRAME & GRATE



NOTES

1. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS

⚠ DITCH INLET



FIRE HYDRANT ASSEMBLY

AS-BUILT

KAMPE ASSOCIATES INC
CIVIL ENGINEERS
LAND SURVEYORS
3681 S.W. CARMAN DRIVE
LAKE OSWEGO, OREGON 97035
(503) 635-6291

NO.	BY	DATE	DESCRIPTION
	PEP	2.2.94	AS-BUILT REVISIONS
⚠	PEP	9.2.92	REV. PER CITY OF WEST LINN
⚠	RKZ	8.20.92	REMOVE MH. / CHANGE NAME ENTRY
⚠	RKZ	5.12.92	GENERAL REVISIONS

REVISIONS

Designed
Drawn RKZ
Checked
Approved
Date 8.14.91
Scale NTS

PREPARED FOR:
MR. KENT ZIEGLER
VISTA RIDGE DEVELOPMENT
18517 S.W. BRYANT ROAD
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RIDGEBROOK PARK SUBDIVISION
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11/11
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