

RENAISSANCE VILLAS

WEST LINN, OREGON

GENERAL NOTES:

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN DESIGN STANDARDS, O.S.H.D. AND A.P.W.A. OREGON CHAPTER SPECIFICATIONS (LATEST EDITION).
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. IF ANY CONFLICTS ARE DISCOVERED, CONTACT THE ENGINEER BEFORE CONTINUING CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
- EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
- 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.
- 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.
- CONTRACTOR SHALL NOTIFY TRILAND DESIGN GROUP, INC. AND THE CITY OF WEST LINN, 48 HOURS BEFORE STARTING CONSTRUCTION OR 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS.
- ALL GRADING SHALL CONFORM TO THE GEOTECHNICAL INVESTIGATION BY TUALATIN HILLS & ASSOCIATES, DATED MARCH 27, 1996 FOR THE SUNSET SUMMIT ESTATES SUBDIVISION (PRIOR NAME).
- ROCK EXCAVATION QUANTITIES SHALL BE DETERMINED BY IN PLACE MEASUREMENT. IF MEASUREMENT IS TO BE MADE BY TRUCKLOAD QUANTITIES, AN APPROXIMATE BULKING FACTOR SHALL BE APPLIED. BULKING FACTOR SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER BASED UPON FIELD OBSERVATIONS DURING CONSTRUCTION.
- TRAFFIC CONTROL AND CONSTRUCTION SHALL BE LIMITED TO THE HOURS BETWEEN 9 AM TO 6 PM UNLESS APPROVED BY THE CITY OF WEST LINN.

ROAD GRADING + PAVING NOTES:

- PRIOR TO PLACEMENT OF AGGREGATE BASE, AND AGAIN PRIOR TO PAVING, THE SUBGRADE SHALL BE PROOF ROLLED WITH A FULLY LOADED 10-12 CUBIC YARD DUMP TRUCK IN THE PRESENCE OF THE ENGINEER AND THE CITY INSPECTOR. ANY SOFT AREAS DETECTED BY THE PROOF ROLLING SHALL BE REMOVED AND BACKFILLED WITH STRUCTURAL FILL AS REQUIRED BY APWA.
- FILLS SHALL BE PLACED IN THIN LIFTS AS DIRECTED BY THE ENGINEER AND COMPACTED TO A DRY DENSITY OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY (AASHTO T-99) WITHIN BUILDING AREAS AND STREET RIGHTS-OF-WAY. ALL FILLS OUTSIDE THESE LIMITS SHALL BE COMPACTED TO 92% OF THE MAXIMUM DRY DENSITY (AASHTO T-99).
- 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.
- ASPHALT CONCRETE PAVEMENT MIX TO BE DESIGNED FROM A MIX FORMULA APPROVED BY O.S.H.D. AND THE CITY OF WEST LINN, FOR MATERIAL USED. CONTRACTOR TO PROVIDE THE ENGINEER WITH CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT, UNLESS OTHERWISE INDICATED.

BUILDING REQUIREMENTS NOTES:

- ROOF AND FOUNDATION DRAINS SHALL BE EITHER CONNECTED TO THE STREET THRU THE CURBS, OR CONNECTED TO HOUSE SERVICE LINES AS PROVIDED ON LOTS WHERE THE BUILDING ELEVATIONS ARE BELOW THE CURBS.
- EXCESS EXCAVATION RESULTING FROM BUILDING CONSTRUCTION SHALL BE EITHER REMOVED FROM THE SITE OR SPREAD AND COMPACTED ON THE LOTS TO A DEPTH NOT TO EXCEED 6 INCHES BUT NOT OUTSIDE THE GRADING LIMITS.

WATER SYSTEM NOTES:

- ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF WEST LINN STANDARDS, THE OREGON STATE HEALTH DIVISION ADMINISTRATIVE RULES, CHAPTER 33, A.W.W.A. AND A.P.W.A. STANDARDS.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL COORDINATE WATERLINE INSTALLATION WITH OTHER UTILITIES.
- ALL PIPE SHALL BE "TYTON JOINT," CLASS 52 DUCTILE IRON. FITTING JOINTS SHALL BE MECHANICAL JOINT ENDS, EXCEPT WHERE SPECIFICALLY SHOWN OR DETAILED OTHERWISE. ALL PIPE AND FITTINGS SHALL BE CEMENT LINED.
- FIRE HYDRANT SHALL BE MUELLER CENTURION MDL. A-423 OR CLOW MEDALLION F-2545 ONLY. HYDRANT ASSEMBLY SHALL BE ONE UNIT ONLY, NO EXTENSIONS ARE ALLOWED. SEE DETAIL.
- ALL TEES, BENDS AND BLOW-OFF LOCATIONS SHALL HAVE A POURED-IN-PLACE CONCRETE THRUST BLOCK.
- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" FROM FINISH GRADE.
- ALL SANITARY SEWER LINES RUNNING PARALLEL TO AND WITHIN 10' LATERALLY OR VERTICALLY OF WATER MAIN, SHALL BE ENCASED IN CONCRETE.
- ANY CROSSING OF WATER MAIN BY SANITARY SEWER SHALL BE MADE AT APPROXIMATELY 90° AND HAVE 18" OF VERTICAL CLEARANCE OR SHALL BE CONSTRUCTED WITH NO JOINTS FOR A DISTANCE OF 9 FEET EITHER SIDE OF CROSSING. SANITARY LINE SHALL BE DUCTILE IRON.
- WATER METERS WILL BE INSTALLED BY THE CITY OF WEST LINN AFTER WATER MAINS HAVE BEEN TESTED IN ACCORDANCE WITH ANSI/AWWA C600-87, AND PASSED DISINFECTION TESTING, UNDER SUPERVISION OF THE INSPECTOR. THE WATER METERS INSTALLATION SHALL BE AFTER CURBS HAVE BEEN INSTALLED AND BACKFILLED, AND PRIOR TO COMPLETION OF FINISH SUBGRADE AND OTHER UTILITY INSTALLATION. DO NOT CONNECT TO EXISTING SYSTEM UNTIL ALL TESTING HAS BEEN COMPLETED AND APPROVED BY THE CITY.

SANITARY + STORM SEWER NOTES:

- STORM SEWER PIPE DENOTED ON THE PLANS AS "PVC" SHALL BE "SUPER-RIB" PVC SPECIFICALLY MADE FOR STORM PIPE.
- STORM + SANITARY SEWER PIPE DENOTED ON THE PLANS AS "DIP" SHALL BE DUCTILE IRON PIPE, CLASS 50.
- ALL P.V.C. SANITARY SEWER PIPE SHALL CONFORM TO ASTM D3034, SDR35 SPECIFICATIONS AND SHALL BE CLEARLY MARKED AS SUCH.
- TRENCH EXCAVATION AND BACKFILL COMPACTION SHALL CONFORM TO A.P.W.A. DIVISION III, SECTIONS 301.1.01 THROUGH 301.3.11. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE THE REQUIRED COMPACTION. ALL EXCESS MATERIAL FROM THE TRENCH EXCAVATION SHALL BE DISPOSED OF ON-SITE IN ACCORDANCE WITH THE GRADING REQUIREMENTS.
- PIPE BEDDING AND PIPE ZONE SHALL BE 3/4"-0" CRUSHED ROCK CONFORMING TO THE PLAN DETAILS.
- TRENCHES WITHIN THE RIGHT-OF-WAYS SHALL BE COMPACTED "CLASS B" BACKFILL CONSISTING OF 3/4"-0" CRUSHED ROCK AND COMPACTED TO 95% OF T-99. TRENCHES OUTSIDE RIGHT-OF-WAYS SHALL BE "CLASS A" COMPACTED TO 92% OF T-99, NATIVE MATERIAL.
- ALL SANITARY SERVICE STUBOUTS SHALL BE A MINIMUM OF 3" INTO PROPERTY AND/OR BEYOND EASEMENT LINE AND SHALL BE MARKED "SANITARY SERVICE" WITH A 2" X 4" FOR FUTURE LOCATION. SERVICE STUBOUTS SHALL BE 4" DIAMETER PIPE.
- ALL STORM DRAINAGE STUBOUTS SHALL BE A MINIMUM OF 3" INTO PROPERTY AND/OR BEYOND EASEMENT LINE AND SHALL BE MARKED "STORM SERVICE" WITH A 2" X 4" FOR FUTURE LOCATION. SERVICE STUBOUTS SHALL BE 4" DIAMETER PIPE.
- ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENTS TO ACCOMMODATE OTHER UTILITIES, AS REQUIRED. SUCH ADJUSTMENTS SHALL BE REVIEWED BY THE CITY OF WEST LINN, AND APPROVED PRIOR TO COMMENCING WORK.
- THE STORM AND SANITARY SYSTEM SHALL BE INSPECTED, TESTED, AND CLEANED IN ACCORDANCE WITH THE CITY OF WEST LINN STREET / UTILITY DESIGN AND CONSTRUCTION STANDARDS, THIS INCLUDES THE FOLLOWING:
STORM - MANDRELL AND TV TESTING
SANITARY - MANDRELL, TV AND PRESSURE TEST.
SANITARY MH'S - VACUUM TESTING
CONNECTIONS TO EXISTING SYSTEMS SHALL NOT BE MADE UNTIL ALL TESTS HAVE BEEN COMPLETED AND APPROVED BY THE CITY OF WEST LINN.
- CONTRACTOR SHALL PREPARE A PRINT FOR THE ENGINEER, SHOWING AS-CONSTRUCTED DATA.
- ALL MANHOLES LOCATED IN UNIMPROVED EASEMENTS SHALL BE WATER TIGHT AND PROVIDED WITH TAMPER-PROOF LIDS. RIMS TO BE SET 12" ABOVE FINISHED GRADE.

STAFF ANALYSIS AND PLANNING DIRECTOR'S DECISION

MARCH 10, 1999

FINDINGS

THE FINDINGS ARE MADE BY THE PLANNING DIRECTOR IN RESPONSE TO THE APPROVAL CRITERIA FOR SECTION 55.100, 75-060 AND 85.200 AND ARE CONTAINED IN THE ADDENDUM.

THIS APPLICATION IS FOUND TO BE AN EXPEDITED SUBDIVISION PURSUANT TO FINDINGS PREPARED IN THE APPLICANT'S SUBMITTAL ADDRESSING THE CRITERIA SET FORTH IN ORS 197.360, AND INCORPORATED HERE BY REFERENCE.

DECISION

BASED UPON THE FINDINGS OF THE ADDENDUM, THE PLANNING DIRECTOR HEREBY APPROVES THE APPLICATION, SUB-97-08, VAR-98-10 AND DR-98-34 A 30 LOT SUBDIVISION KNOWN AS OAKRIDGE TOWNHOMES. THE PLANNING DIRECTOR HAS DETERMINED THAT THE FOLLOWING CONDITIONS OF APPROVAL SHALL APPLY.

CONDITIONS OF APPROVAL

- VISITOR PARKING SPACES SHALL BE PAINTED AS "VISITOR" OR "GUEST".
- THE FIRE TURNAROUND ON DRIVE B SHALL BE DESIGNED TO TUALATIN VALLEY FIRE & RESCUE STANDARD PRIOR TO SUBMITTING A PLAT TO THE CITY.
- NO TREE REMOVAL SHALL OCCUR UNTIL A GRADING PERMIT HAS BEEN ISSUED. TREES ON INDIVIDUAL LOTS SHALL REMAIN UNTIL BUILDING PERMITS HAVE BEEN ISSUED.
- A TREE PLANTING PLAN SHALL BE SUBMITTED TO THE CITY FOR THE AREA BETWEEN THE RETAINING WALL AND THE NORTH PROPERTY LINE. A GUARANTEE OF 125% OF THE COST OF THE TREES BASED ON THE APPROVED TREE PLAN SHALL BE SUBMITTED TO THE CITY PRIOR TO SUBMITTING THE PLAT TO THE CITY. THE TREES SHALL BE PLANTED DURING THE FALL OR SPRING AFTER COMPLETION OF LOOP A.
- THE APPLICANT SHALL PROVIDE A PLAN FOR DIFFERENTIATING THE COLORS OF BOTH THE FRONT AND REAR OF INDIVIDUAL UNITS. THE FRONT AND REAR OF EACH UNIT SHALL HAVE AN ASPECT OF COLOR WHICH DIFFERENTIATES IT FROM THE UNIT ON EACH SIDE OF IT. COLOR VARIATION CAN OCCUR USING DIFFERENT COLORS FOR THE BODY OF THE HOME, DOORS, EAVES, WINDOW FRAMES AND RAILINGS. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE CITY PLANNING DIRECTOR PRIOR TO ISSUANCE OF BUILDING PERMITS.
- THE MATERIAL OF PEDESTRIAN PATHS SHALL BE CONCRETE AND BE AT LEAST SIX FEET WIDE AND PLACED WITHIN A 20 FOOT WIDE CORRIDOR DELINEATED BY A FENCE AT LEAST THREE FEET IN HEIGHT. THE MATERIAL OF THE FENCE SHALL BE REVIEWED AND APPROVED BY THE PLANNING DIRECTOR PRIOR TO SUBMITTING THE PLAT TO THE CITY. SIGNS IDENTIFYING THE PATHS SHALL BE PLACED AT EACH PEDESTRIAN ACCESS POINT.

MODIFICATION, AS PER MISC-99-14; REDUCE THE WIDTH OF THE PEDESTRIAN CORRIDOR FROM 20 FEET TO BETWEEN 15 AND 20 FEET FOR APPROXIMATELY 45 LINEAL FEET.

- THE APPLICANT SHALL PROVIDE A TOTAL OF 9,000 SQUARE FEET SHARED OUTDOOR RECREATION AREA THAT IS USABLE RECREATION SPACE PRIOR TO SUBMITTAL OF THE PLAT. SMALL, MARGINAL, AND INCIDENTAL PARCELS OF LAND CANNOT BE CONSIDERED USABLE RECREATION AREA. THEREFORE, LOT 30 SHALL BE ELIMINATED AND MADE A SHARED OUTDOOR RECREATION AREA IN ORDER TO MEET THE 9,000 SQUARE FOOT REQUIREMENTS.

MODIFICATION, AS PER MISC-99-14; TO PROVIDE ADDITIONAL OUTDOOR RECREATION AREA ON THE SITE WHILE ALLOWING THE APPLICANT TO RETAIN PROPOSED LOT 30 AS A BUILDABLE LOT

- ALL SHARED OUTDOOR RECREATION AREAS SHALL BE ACCESSIBLE BY PEDESTRIAN PATHS AND IDENTIFIED BY FENCING AND SIGNAGE.
- THE LOOP STREET DESIGNATED AS STREET A SHALL BE A ONE-WAY STREET WITH THE ENTRANCE TO THE SUBDIVISION BEING AT THE SOUTHERLY INTERSECTION WITH BLAND CIRCLE, AND THE EXIT FROM THE SUBDIVISION BEING AT THE NORTHERLY INTERSECTION WITH BLAND CIRCLE. THE PLAT SHALL NOT BE APPROVED BY THE CITY UNTIL THE CITY COUNCIL HAS DESIGNATED THIS STREET AS A ONE-WAY STREET.

STREET A SHALL BE CONSTRUCTED WITH THE TWO EAST-WEST SECTIONS OF THE STREET AT A PAVED WIDTH OF 24 FEET TO ALLOW PARKING ON ONE SIDE OF THE STREET.

MODIFICATION, AS PER RESOLUTION NO-99-13; THE NEW LOOP ROAD SHALL HAVE A MINIMUM TRAVEL WIDTH OF 20 FEET.

- THE NORTHERLY PORTION OF STREET A WHICH IS ADJACENT TO TAX LOT 1501 SHALL BE CONSTRUCTED WITH THE SIDEWALK NEXT TO THE PROPERTY LINE OF LOT 1 AND WITH THE CURB FLUSH AGAINST THE SIDEWALK WITH NO PLANTER STRIP. THE HEIGHT OF THE RETAINING WALL SHALL BE LIMITED TO FOUR FEET TO INSURE THAT THE TOP OF THE RETAINING WALL IS BELOW THE TOP OF THE EXISTING FENCE LOCATED AT THE SOUTHERLY PROPERTY LINE OF TAX LOT 1501.

- THE TWO PRIVATE DRIVES SHALL BE CONSTRUCTED TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF CDC 48.030.B.2.

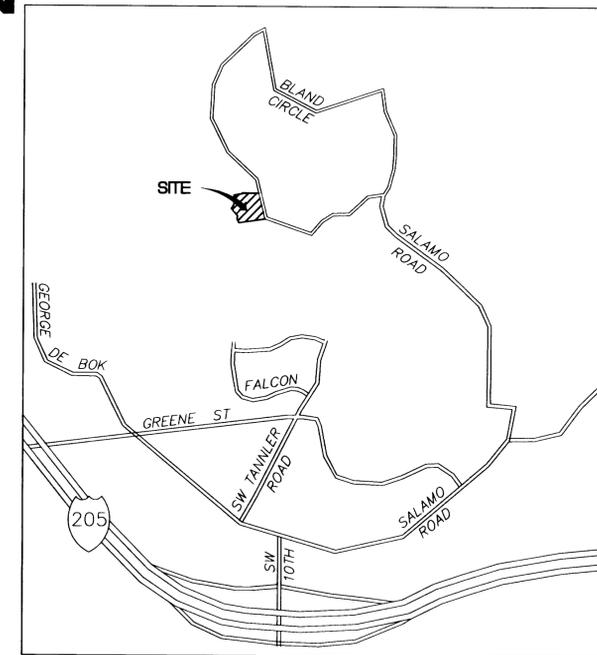
- THE SIDEWALK THAT IS SHOWN TO STUB AT THE NORTHERLY PROPERTY LINE SHALL BE RELOCATED AND INTEGRATED INTO A SECOND PEDESTRIAN CONNECTION THAT SHALL BE LOCATED WITHIN A MINIMUM 20-FOOT WIDE CORRIDOR ADJACENT TO THE NORTHERN PROPERTY LINE BETWEEN STREET A AND ALPINE DRIVE.
- THE SANITARY SEWER AND/OR THE STORM SEWER SHALL BE RELOCATED AT THE NORTHERLY SECTION OF STREET A TO INSURE THAT THE MAINS ARE NOT BENEATH THE PROPOSED RETAINING WALL.
- THE APPLICANT SHALL BE REQUIRED TO MAKE A PAYMENT-IN-LIEU FEE FOR THE 20.5 PERCENT PHOSPHOROUS WHICH WILL NOT BE REMOVED BY THE WATER QUALITY FACILITIES. THIS IN-LIEU FEE SHALL BE AS PER THE RATES USED BY THE UNIFIED SEWAGE AGENCY.
- THE WATER SERVICES FOR LOTS 1 THROUGH 8 SHALL BE CONNECTED OFF OF THE HORTON ZONE WATER MAIN.
- PATHWAYS THROUGHOUT THE PROJECT SHALL NOT EXCEED 12 PERCENT SLOPE UNLESS STAIRS OF THE SAME MATERIAL AS THE PATHWAYS ARE INCORPORATED.
- CROSSWALKS SHALL BE PAINTED AT BLAND CIRCLE/STREET A INTERSECTIONS AND AT ALL REMAINING PEDESTRIAN CROSSINGS.
- LOTS 1 THROUGH 6 SHALL HAVE ACCESS TO STREET A AND NO ACCESS TO BLAND CIRCLE. THE ACCESS RESTRICTION FOR THESE LOTS SHALL BE SHOWN ON THE PLAT. A MINIMUM 10 FOOT WIDE PLANTING SCREEN SHALL BE PLACED IMMEDIATELY WEST OF THE SIDEWALK ON BLAND CIRCLE. A PLANTING PLAN FOR THIS AREA SHALL BE REVIEWED AND APPROVED BY THE PLANNING DIRECTOR PRIOR TO APPROVAL BY THE CITY OF THE PLAT. A SIX-FOOT HIGH WOODEN FENCE SHALL BE CONSTRUCTED BETWEEN THE PLANTING SCREEN AND LOTS 1 THROUGH 6.
- THE EROSION CONTROL PLAN SHALL BE IMPLEMENTED PRIOR TO ISSUANCE OF A GRADING PERMIT. THE EROSION CONTROL PLAN SHALL BE REVISED TO OMIT GRADING OF THE SITE TO STREET A AND DRIVES A AND B. INDIVIDUAL LOTS SHALL NOT BE GRADED IN ORDER TO MINIMIZE SITE DISTURBANCE. ALL AREAS OF EXPOSED SOIL THAT WILL BE LEFT UNDISTURBED FOR OVER SEVEN DAYS SHALL BE COVERED WITH STRAW MULCH AND SEEDS AS PER CLACKAMAS COUNTY EROSION PREVENTION AND SEDIMENT CONTROL PLANS TECHNICAL GUIDANCE HANDBOOK REQUIREMENTS.
- FIVE-FOOT UTILITY EASEMENTS SHALL BE SHOWN ON THE PLAT ON FRONT AND REAR LOT LINES. SHARED OUTDOOR RECREATION AREAS SHALL BE IDENTIFIED ON THE PLAT AS PUBLIC ACCESS EASEMENTS.
- THE APPLICANT SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL POLICIES AND CODES UNLESS GRANTED A WRITTEN WAIVER, MODIFICATION AND/OR VARIANCE BY THE APPROPRIATE DECIDING BODY.

NOTE: AT THE END OF CONSTRUCTION A LETTER FROM AN ENGINEER REGISTERED IN THE STATE OF OREGON SHALL BE SUPPLIED WHICH CERTIFIES THAT THE IMPROVEMENTS WERE CONSTRUCTED PER THE PLANS AND SPECIFICATIONS.

LEGEND

(NOTE: ALL ITEMS MAY NOT BE USED)

- | | |
|---------------------------|--|
| • FOUND MONUMENT AS NOTED | ☀ CONIFER TREE |
| ⊙ SEWER MANHOLE | ☀ DECIDUOUS TREE |
| ⊙ STORM MANHOLE | ===== BRUSH/TREE LINE |
| ⊙ CATCH BASIN | ===== CULVERT |
| ⊙ CURB INLET | ===== CURB |
| ⊙ CLEAN OUT | ----- DITCH/CREEK |
| ⊙ FIRE HYDRANT | ===== GUARDRAIL |
| ⊙ WATER METER | ----- EDGE OF PAVEMENT |
| ⊙ WATER VALVE | ----- FENCE |
| ⊙ GAS VALVE | ----- GAS LINE |
| ⊙ GAS METER | ----- PROPERTY LINE |
| ⊙ GUY WIRE | ----- OHU - OVERHEAD UTILITY |
| ⊙ IRRIGATION VALVE | ----- SS - SANITARY SEWER LINE |
| ⊙ SPRINKLER HEAD | ----- SD - STORM DRAIN LINE |
| ⊙ STREET LIGHT | ----- UGP - UNDERGROUND POWER LINE |
| ⊙ MAILBOX | ----- UGT - UNDERGROUND TELEPHONE LINE |
| ⊙ POWER PEDESTAL | ----- W - WATER LINE |
| ⊙ SIGNAL CONTROL BOX | |
| ⊙ SIGNAL POLE | ⊙ CONCRETE |
| ⊙ SIGN | |
| ⊙ TELEPHONE MANHOLE | ⊙ PROPOSED CATCH BASIN |
| ⊙ TELEPHONE PEDESTAL | ⊙ PROPOSED CLEANOUT |
| ⊙ TEST PIT | ⊙ PROPOSED MANHOLE |
| ⊙ UTILITY POLE | ⊙ PROPOSED FIRE HYDRANT |
| ⊙ WELL | |



VICINITY MAP

NOT TO SCALE.

BENCHMARKS:

BENCH MARK: CITY OF WEST LINN BENCH MARK "B" IS 93.5' EAST AND 17.0' SOUTH OF EDGE OF PAVEMENT FROM 5-WAY INTERSECTION OF ROSEMONT/DAY/SANTA ANITA ST. CAP ON PIPE WITH YELLOW WATER WORKS LTD. ELEV = 667.22

SHEET INDEX

- COVER SHEET & INDEX
- GRADING AND EROSION CONTROL
- EROSION CONTROL DETAILS
- STREET PLAN
- STORM DRAIN PLAN
- STREET & STORM PROFILE
- STREET & STORM PROFILE
- BLAND CIRCLE STREET PROFILE
- PRIVATE STORM DRAIN LINE C
- SANITARY SEWER PLAN
- SANITARY PROFILE
- SANITARY PROFILES
- WATER PLAN
- STREET TREE AND SIGN PLAN
- RETAINING WALL DETAILS
- PEDESTRIAN PATH DETAIL
- DETAILS
- DETAILS
- DETAILS
- LANDSCAPE PLAN

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

NO.	BY	DATE	DESCRIPTION
1	PK	3/16/00	AS-BUILTS
2	CWQ	10/12/00	REVISED AS-BUILTS
3	CWQ	2/21/01	REVISED AS-BUILTS
4	CWQ	03/01/01	REVISED AS-BUILTS
5	CWQ	03/12/01	AS-BUILTS MYLAR

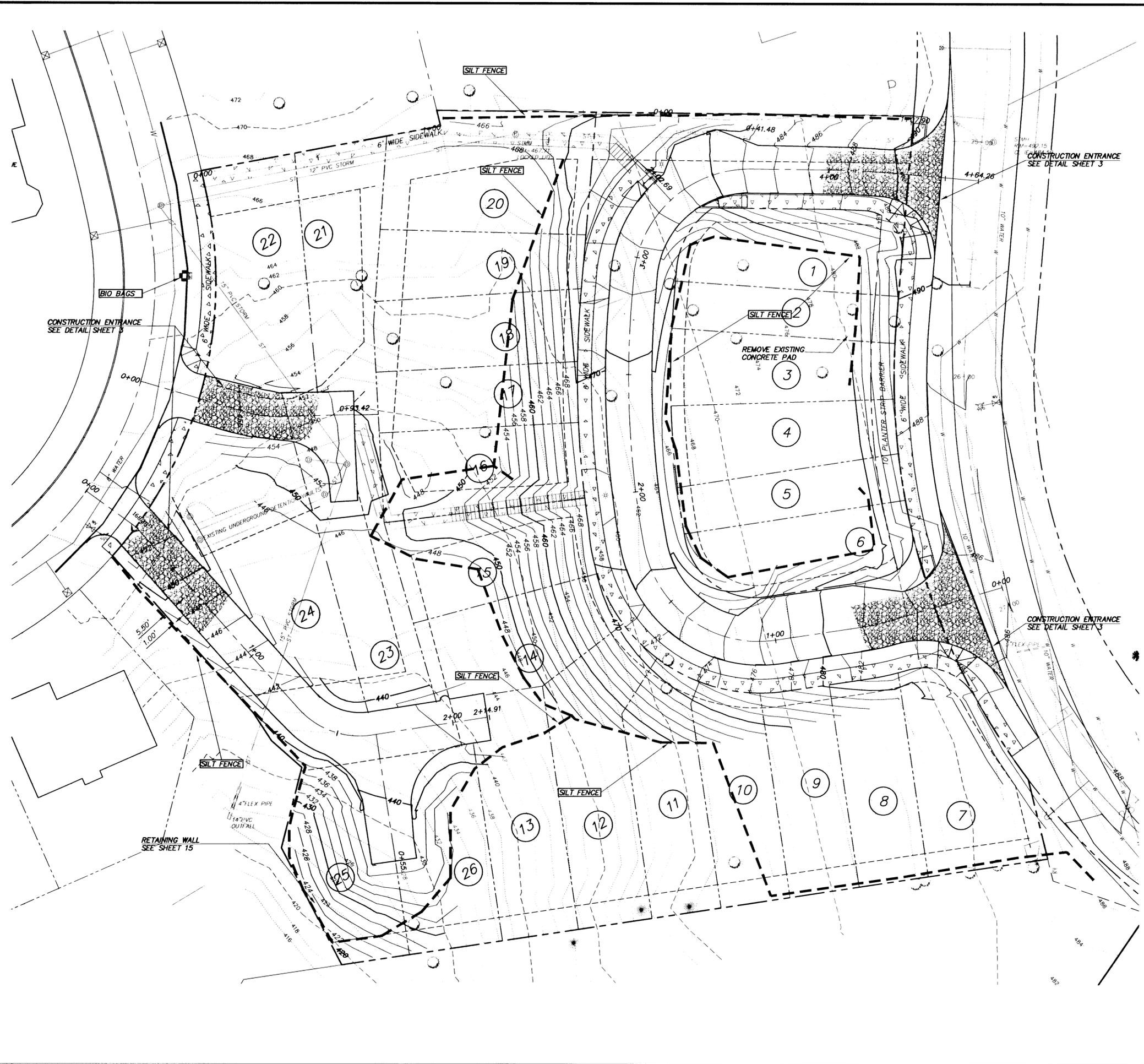


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COVER SHEET AND INDEX
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

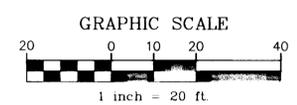
Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	8/10/99



NOTES: NO GRADING SHALL BE ALLOWED OUTSIDE THE CONSTRUCTION LIMITS AND THE SILT FENCE

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



NO	BY	DATE	DESCRIPTION
5	CWQ	03/13/01	AS-BUILTS MYLAR
4	CWQ	03/01/01	REVISED AS-BUILTS
3	CWQ	2/21/01	REVISED AS-BUILTS
2	CWQ	10/13/00	REVISED AS-BUILTS
1	PK	4/25/00	AS-BUILTS



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GRADING AND EROSION CONTROL PLAN
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

Project: 98014
 Designed: CWQ
 Drawn: CWQ
 Checked: SBT
 Date: 8/10/99

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SEEDING / MULCHING NOTES:

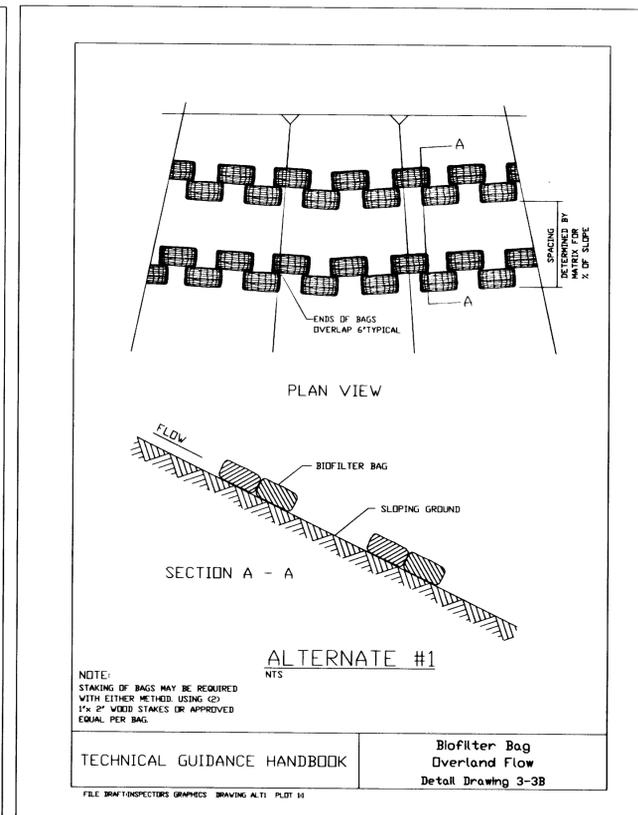
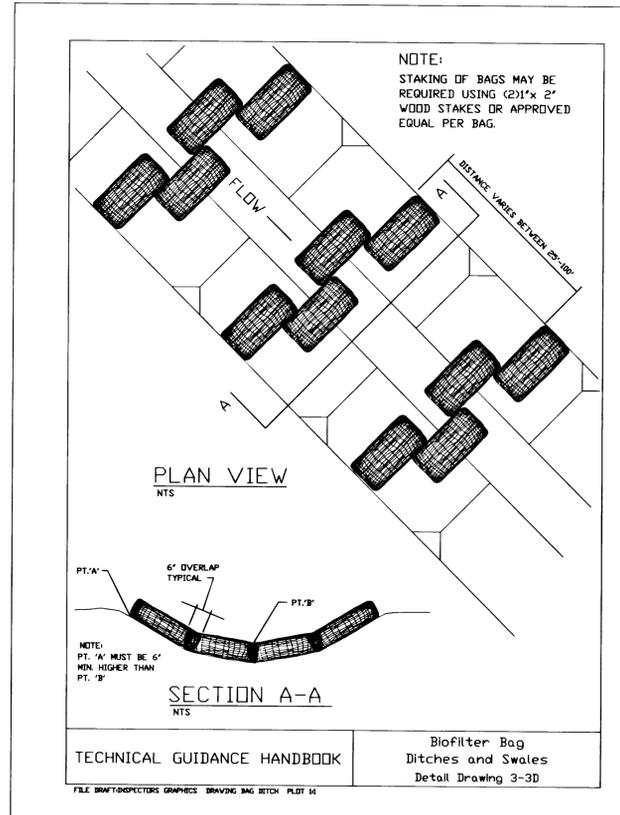
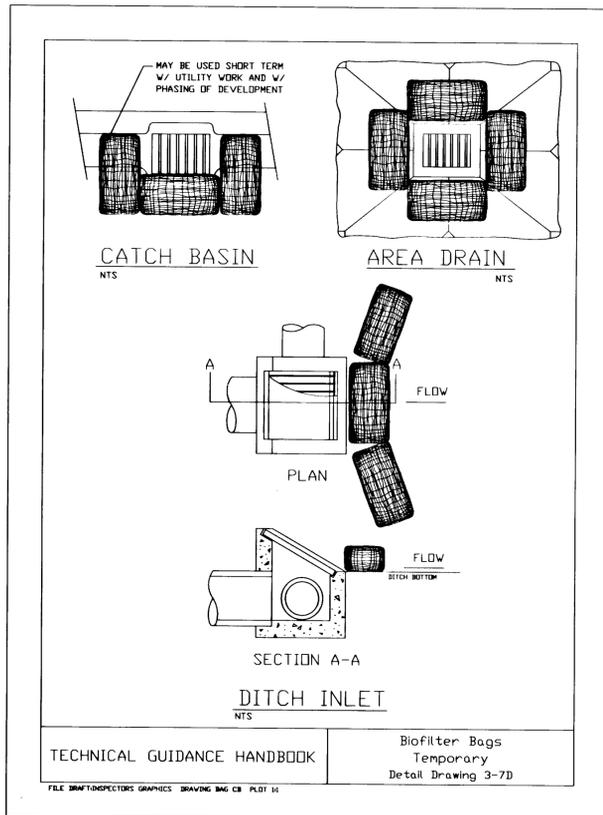
- A. Temporary grass cover measures must be fully established by November 1 or other cover measures will have to be implemented until adequate grass coverage is achieved. To establish an adequate grass stand for controlling erosion by November 1, it is recommended that seeding and mulching occur by September 1.
- B. Hydromulch shall be applied with grass seed at a rate of 2000 lb./acre. On slopes steeper than 10 percent, hydroseed and mulch shall be applied with a bonding agent (tackifier). Application rate and methodology to be in accordance with seed supplier recommendations.
- C. Dry, loose, weed-free straw used as mulch shall be applied at double the hydromulch application requirement (4000 lb./acre). Anchor straw by working in by hand or with equipment (rollers, cleat tracks, etc.).
- D. Mulch shall be spread uniformly immediately following seeding.
- E. Soil Preparation - Top soil should be prepared according to landscape plans, if available, or recommendations of grass seed supplier. It is recommended that slopes be roughened before seeding by "track-walking," (driving a crawling tractor up and down slopes to leave a pattern of cleat imprints parallel to slope contours) or other method to provide more stable sites for seeds to rest.
- F. Seeding - Recommended erosion control grass seed mixes are as follows. Similar mixes designed to achieve erosion control may be substituted if approved by jurisdiction.
 - 1. Dwarf Grass Mix (low height, low maintenance):
Dwarf Perennial Ryegrass, 80% by weight
Creeping Red Fescue, 20% by weight
Application rate: 100 pounds minimum per acre
 - 2. Standard Height Grass Mix
Annual Ryegrass, 40% by weight
Turf-type Fescue, 60% by weight
Application rate: 100 pounds minimum per acre
- G. Fertilization for grass seed - In accordance with supplier's recommendations. Development areas within 50 feet of water bodies and wetlands must use a non-phosphorus fertilizer.
- H. Netting and Anchors, as needed - For disturbed areas on slopes and in ditches/swales, biodegradable netting or jute is desirable and may be used instead of bonding agents to provide a stable area for seeding. Netting should be anchored in accordance with manufacturer's recommendations. On the steep slopes west of street "A" and south of Drive "B" netting is required.
- I. Watering - Seeding shall be supplied with adequate moisture to establish grass. Supply water as needed, especially in abnormally hot or dry weather or on adverse sites. Water application rates should be controlled to provide adequate moisture without causing runoff.
- J. Re-seeding - Areas which fail to establish grass cover adequate to prevent erosion shall be re-seeded as soon as such areas are identified, and all appropriate measures taken to establish adequate cover.

SEDIMENT FENCE:

- 1. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6-inch overlap, and both ends securely fastened to the post, or overlap 2"x 2" posts and attach as shown on detail sheet 3-2.
- 2. The filter fabric fence shall be installed to follow the contours where feasible. The fence posts shall be spaced a maximum of 6 feet apart and driven securely into the ground a minimum of 24 inches.
- 3. The filter fabric shall have a minimum vertical burial of 6 inches. All excavated material from filter fabric fence installation, shall be backfilled and compacted, along the entire disturbed area.
- 4. Standard or heavy duty filter fabric fence shall have manufactured stitched loops for 2"x 2" post installation. Stitched loops shall be installed on the uphill side of the sloped area.
- 5. Filter fabric fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently protected and stabilized.
- 6. Filter fabric fences shall be inspected by applicant/contractor immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately.

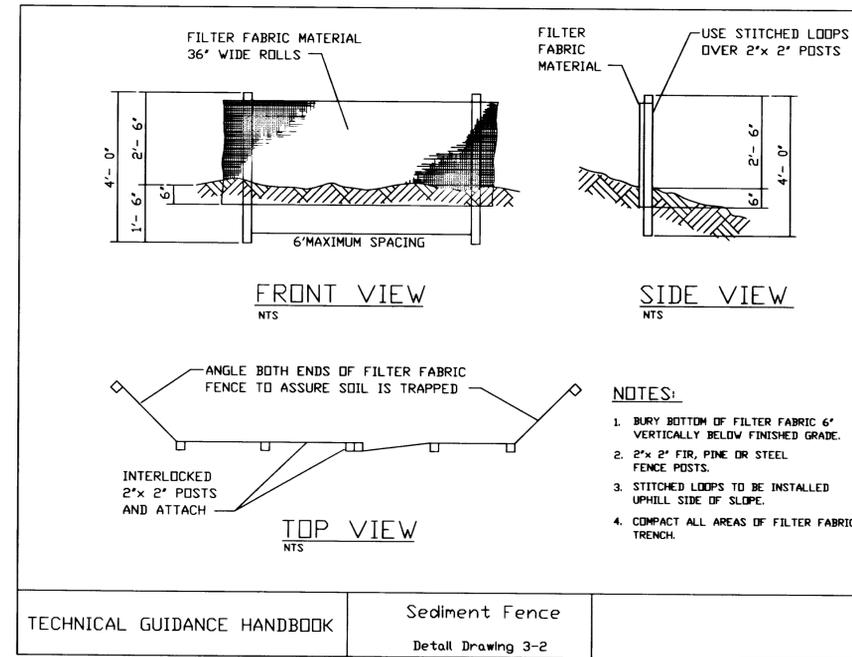
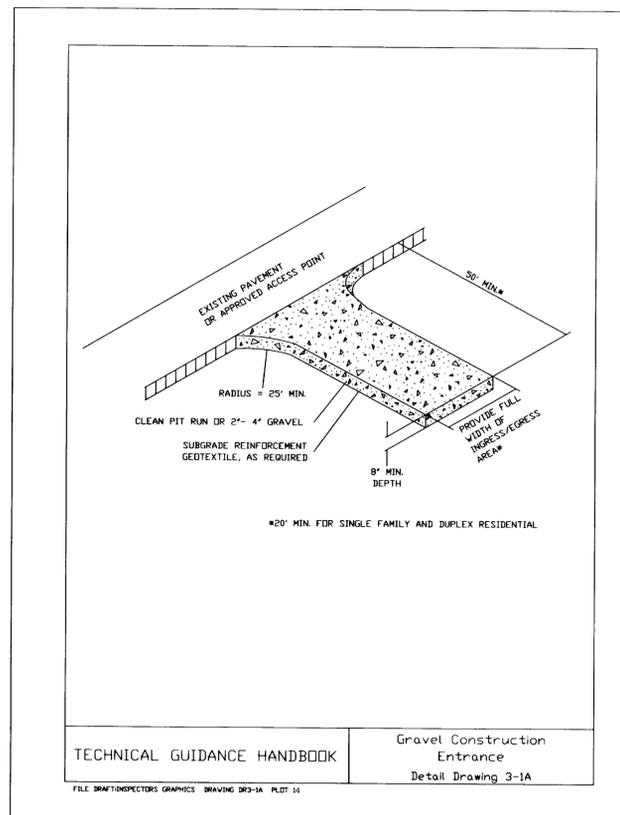
EROSION CONTROL (WET WEATHER) NOTES:

- A. Wet weather measures apply to all disturbed soil areas with a slope greater than 2% and any soil stock piled on site. All section references in the following wet weather notes refer to sections of the Erosion/Sedimentation Control Plans Technical Guidance Handbook, Unified Sewerage Agency, August 1994
- B. All soil stock piled on site shall be treated with 2"-min. straw mulch cover (Sec. 3.3.7)



AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



NO.	DATE	BY	DESCRIPTION
1	10/13/00	AS-BUILT	REVISED AS-BUILT
2	10/13/00	AS-BUILT	REVISED AS-BUILT
3	10/13/00	AS-BUILT	REVISED AS-BUILT

REVISION

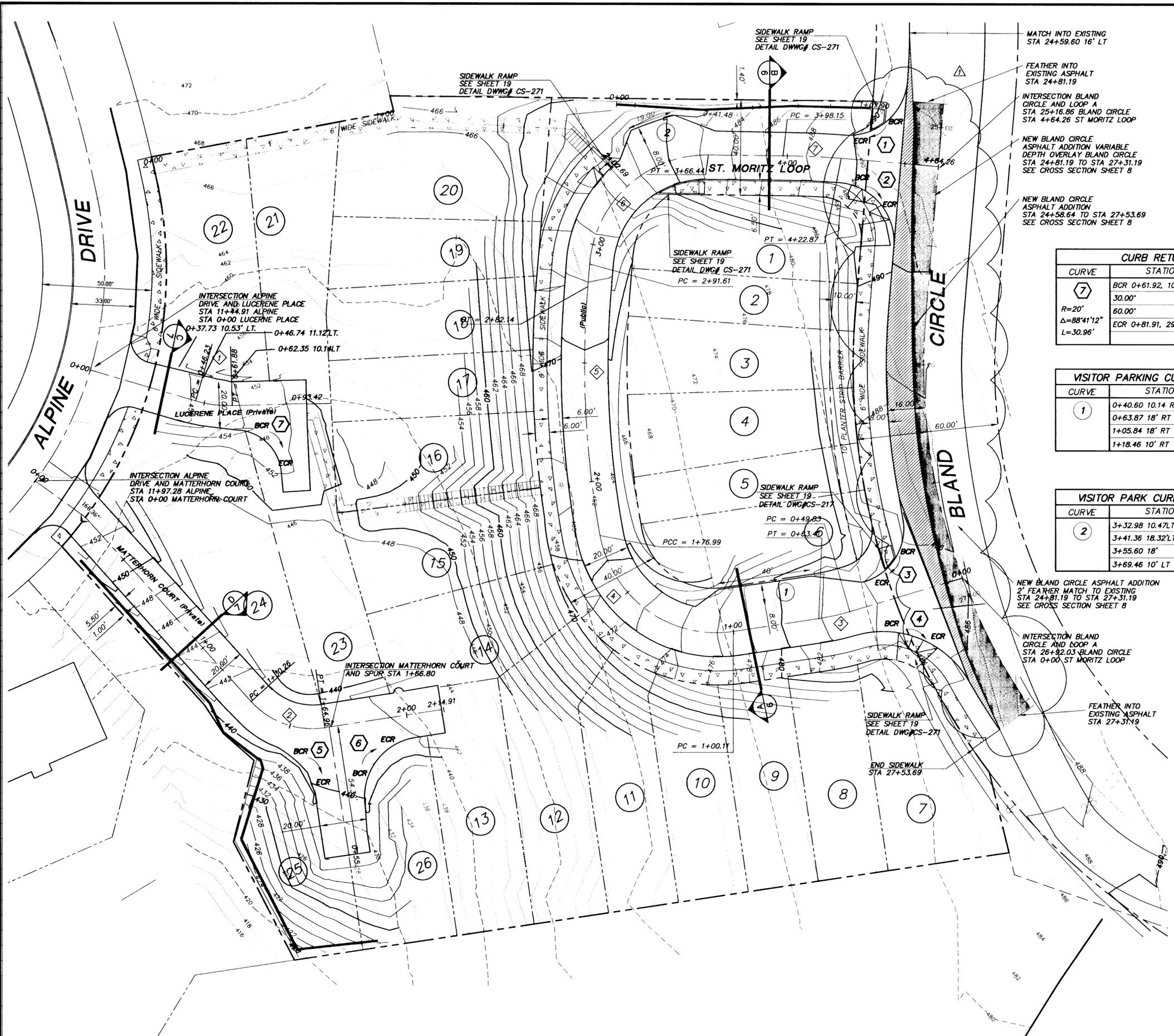
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FAX (503) 968-7439

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PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
1672 WILLAMETTE FALLS DRIVE
WEST LINN, OR 97068
PHONE (503) 557-8000
FAX (503) 656-1601

EROSION CONTROL NOTES AND DETAILS
RENAISSANCE VILLAS
BLAND CIRCLE
WEST LINN, OR

Project	98014
Designed	MC
Drawn	MC
Checked	SBT
Date	8/10/99



Q CURVE DATA

CURVE	RADIUS	LENGTH	DELTA	STATION
1	50.00'	15.65'	17°56'33"	PC 0+46.23 PT 0+61.88
2	35.00'	34.70'	56°48'02"	PC 1+30.26 PT 1+64.96
3	97.00'	13.58'	75°1'38"	PC 0+49.83 PT 0+63.41
4	50.00'	76.88'	88°26'18"	PC 1+00.11 PT 1+76.99
5	396.00'	105.15'	14°52'53"	PC 1+76.99 PT 2+82.14
6	50.00'	74.83'	85°44'53"	PC 2+91.61 PT 3+66.44
7	393.50'	24.78'	3°37'04"	PC 3+98.15 PT 4+22.87

MATCH INTO EXISTING ASPHALT STA 24+59.60 16' LT

FEATHER INTO EXISTING ASPHALT STA 24+81.19

INTERSECTION BLAND CIRCLE AND LOOP A STA 25+16.86 BLAND CIRCLE STA 4+64.26 ST MORITZ LOOP

NEW BLAND CIRCLE ASPHALT ADDITION VARIABLE DEPTH OVERLAY BLAND CIRCLE STA 24+81.19 TO STA 27+31.19 SEE CROSS SECTION SHEET 8

NEW BLAND CIRCLE ASPHALT ADDITION STA 24+58.64 TO STA 27+53.69 SEE CROSS SECTION SHEET 8

CURB RETURN TABLE

CURVE	STATION	TC ELEV
7	BCR 0+61.92, 10.0' RT	455.07
	30.00'	453.92
	60.00'	453.10
	ECR 0+81.91, 29.54' RT	452.94

VISITOR PARKING CURB ANGLES

CURVE	STATION	TC ELEV
1	0+40.60 10.14 RT	483.47
	0+63.87 18' RT	481.80
	1+05.84 18' RT	476.13
	1+18.46 10' RT	474.62

VISITOR PARK CURB ANGLES

CURVE	STATION	TC ELEV
2	3+32.98 10.47 LT	477.54
	3+41.36 18.32 LT	478.59
	3+55.60 18'	480.88
	3+69.46 10' LT	483.16

CURB RETURN TABLE

CURVE	STATION	TC ELEV
1	BCR 24+81.19 16.0' RT	492.40
	1/4 Δ	492.03
	1/2 Δ	491.37
	3/4 Δ	490.54
	ECR 4+23.25 10.00' LT	489.65

CURB RETURN TABLE

CURVE	STATION	TC ELEV
2	BCR 4+22.99 10.0' RT	490.56
	1/4 Δ	490.60
	1/2 Δ	490.64
	3/4 Δ	490.66
	HIGH POINT 34°43'16"	490.69
	ECR 25+51.60 16.0' RT	490.41

CURB RETURN TABLE

CURVE	STATION	TC ELEV
3	BCR 26+59.17, 16.0' RT	486.64
	1/4 Δ	486.22
	1/2 Δ	485.51
	3/4 Δ	484.68
	ECR 0+41.35, 10' RT	483.94

CURB RETURN TABLE

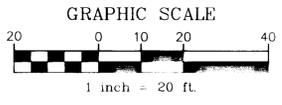
CURVE	STATION	TC ELEV
4	BCR 0+50.23, 10.0' LT	483.23
	15' Δ	484.15
	30' Δ	484.91
	45' Δ	485.55
	60' Δ	486.02
	75' Δ	486.29
	ECR 27+31.19, 16.0' RT	486.30

CURB RETURN TABLE

CURVE	STATION	TC ELEV
5	BCR 1+47.60, 10.24' RT	440.28
	30' Δ	439.81
	60' Δ	439.76
	ECR 0+26.65, 10.0 RT	439.75
	L=26.93'	

CURB RETURN TABLE

CURVE	STATION	TC ELEV
6	BCR 0+35.25, 10.0' RT	439.98
	1/4 Δ	440.51
	1/2 Δ	441.03
	3/4 Δ	441.43
	ECR 2+01.61, 10.25' RT	441.75
	L=39.27'	



AS-BUILT
 THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

NOTES: NEW PAVEMENT AND REPAIR LIMITS ON BLAND CIRCLE WILL BE VERIFIED BY THE CITY AFTER ALL WATER SYSTEM SA AND ST CONNECTIONS WILL BE COMPLETED

NO.	BY	DATE	DESCRIPTION
6	CWQ	03/13/01	AS-BUILTS M-LAR
5	CWQ	03/01/01	REVISED AS-BUILTS
4	CWQ	2/21/01	REVISED AS-BUILTS
3	CWQ	10/13/00	REVISED AS-BUILTS
2	P.K.	4/29/00	AS-BUILTS
1			

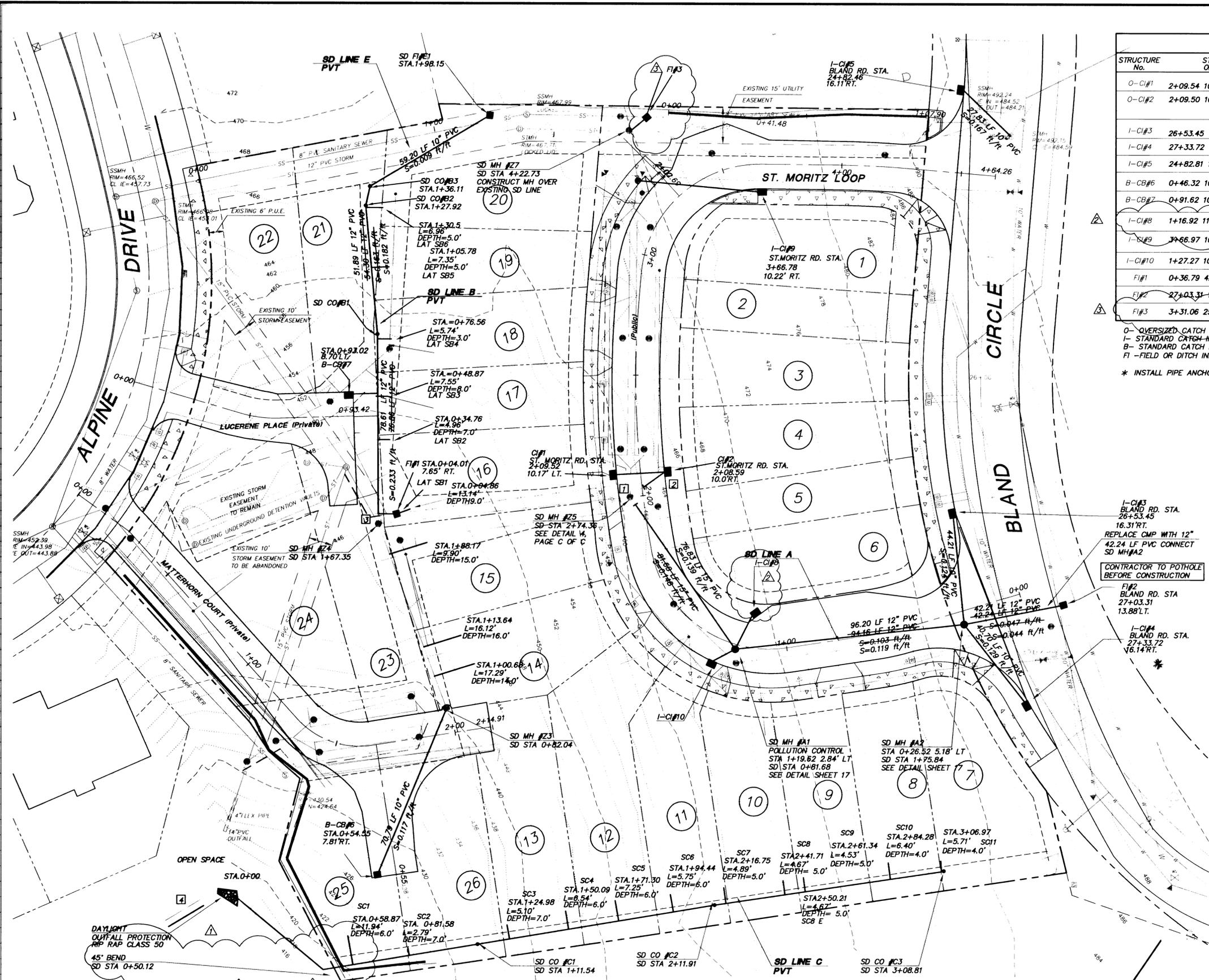


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STREET PLAN
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

Project: 98014
 Designed: CWQ
 Drawn: CWQ
 Checked: SBT
 Date: 8/10/99



CURB INLET TABLE

STRUCTURE No.	STATION OFFSET	INVERT ELEVATION	PIPE **	TOP OF CURB ELEVATION
0-CI#1	2+09.54 10' LT "ST. MORITZ LP"	465.35	23.48 10" 0.036 ft/ft	468.85
0-CI#2	2+09.50 10 RT "ST. MORITZ LOOP"	464.50 IN	462.00 OUT 17.63 12" 0.354 "	468.85
1-CI#3	26+53.45 16' RT "BLAND CIRCLE"	483.73	44.21 10" 0.129 ft/ft	486.73
1-CI#4	27+33.72 16 RT "BLAND CIRCLE"	483.24	40.70 10" 0.129 "	486.24
1-CI#5	24+82.81 16.02 RT "BLAND CIRCLE"	489.35	27.83 10" 0.167 "	492.35
B-CB#6	0+46.32 10 RT "TURNOUT"	435.04	70.79 10" 0.092 "	438.54
B-CB#7	0+91.62 10 LT "LUCERNE PLACE"	447.42	11.78 10" 0.079 "	451.17
1-CI#8	1+16.92 11.33 RT "ST. MORITZ LOOP"	470.86	15.61 10" 0.178 "	474.36
1-CI#9	3+66.97 10.00 RT "ST. MORITZ LOOP"	479.28	53.87 10" 0.425 " *	482.78
1-CI#10	1+27.27 10.00 LT "ST. MORITZ LOOP"	469.88	11.25 10" 0.160 "	473.38
FI#1	0+36.79 4.44 LT "SOUTH PED PATH"	444.00	6.84 10" 1.4035 "	448.50
FI#2	27+03.31 13 LT "BLAND CIRCLE"	480.00	42.24 12" 0.095 "	484.50
FI#3	3+31.06 25.60 LT "ST. MORITZ LOOP"	470.00	8.67 10" 0.346 "	473.64

0- OVERSIZED CATCH INLET SEE DETAIL SHEET 17 (TYPE 4A)
 1- STANDARD CATCH INLET SEE DETAIL SHEET 17 (TYPE 2 1/2 A)
 B- STANDARD CATCH BASIN SEE DETAIL SHEET 17 (TRAPPED CATCH BASIN)
 FI - FIELD OR DITCH INLET SEE DETAIL SHEET 17
 * INSTALL PIPE ANCHORS EVERY 25'

SD LINE B LATERALS

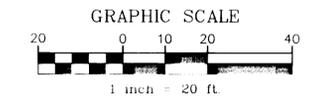
LAT.	SD STA	I.E. @ MAIN	OFFSET	END IE
SB1	0+04.86	444.2 @ FI#1	5.54'	444.31
SB2	0+34.76	441.02	4.00'	441.10
SB3	0+48.87	446.52	3.01'	446.58
SB4	0+76.56	452.08	3.75'	452.16
SB5	1+05.78	457.86	5.66'	457.97
SB6	1+30.50	461.61	6.03'	461.73

SD LINE C LATERALS

LAT.	SD STA	I.E. @ MAIN	OFFSET	END IE
SC1	0+58.87	417.14	8.00'	417.30
SC2	0+91.58	420.45	8.00'	420.59
SC3	1+24.98	432.48	8.00'	432.64
SC4	1+50.09	439.47	8.00'	439.63
SC5	1+71.30	446.22	8.00'	446.38
SC6	1+94.44	453.12	8.00'	453.28
SC7	2+16.75	458.94	8.00'	459.10
SC8	2+41.71	462.39	8.00'	462.65
SC9	2+61.34	465.78	8.00'	465.94
SC10	2+84.28	469.22	8.00'	469.38
SC11	3+06.97	472.55	8.00'	472.71

- CONSTRUCTION NOTES:
- CONNECT TO EXISTING STUB IE 456.50 SD LINE A
 - CONNECT TO EXISTING STUB IE 456.96 CB INLET
 - CONNECT TO EXISTING STUB IE 435.42 SD LINE B
 - INSTALL PARALLEL 12" CMP TO EXISTING 12" CMP. 16' LF. IE IN 420', IE OUT 418.5'
- GENERAL NOTE:
 CONFLICTS WITH EXISTING UTILITIES SHALL BE RESOLVED IN THE FIELD AS DIRECTED BY THE ENGINEER AND APPROVED BY THE CITY.

AS-BUILT
 THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



SEE SHEET 9 OF 19

NO.	BY	DATE	DESCRIPTION
1	MC	3/16/99	AS-BUILT MYPAR
2	MC	3/16/99	REVISED AS-BUILT
3	MC	3/16/99	REVISED AS-BUILT
4	MC	3/16/99	REVISED AS-BUILT
5	MC	3/16/99	REVISED AS-BUILT
6	MC	3/16/99	REVISED AS-BUILT
7	MC	3/16/99	REVISED AS-BUILT
8	MC	3/16/99	REVISED AS-BUILT

REGISTERED PROFESSIONAL ENGINEER
 No. 16,222
 State of Oregon
 DEC 1990
VIC ACCOMANDO

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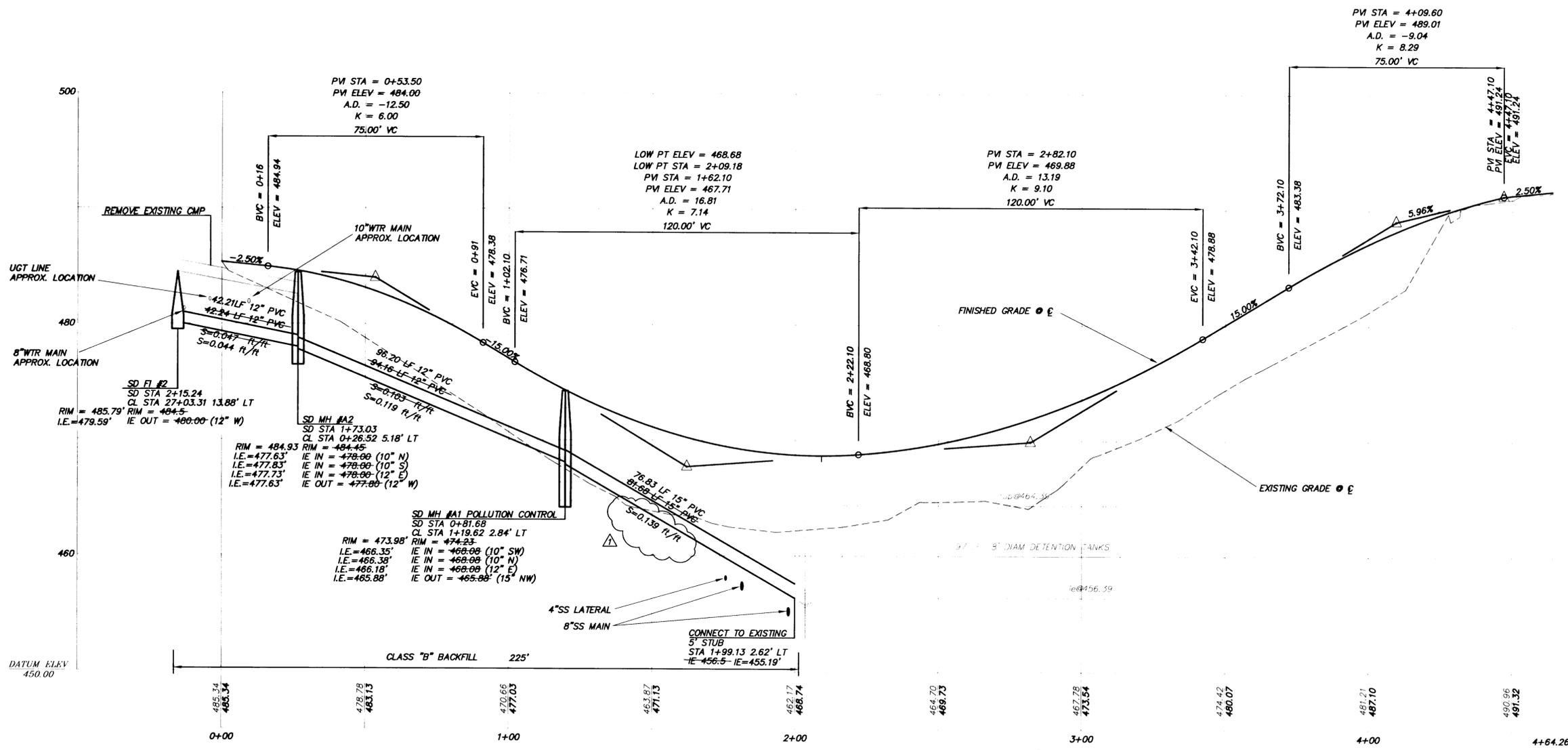
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PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
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STORM DRAIN PLAN
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

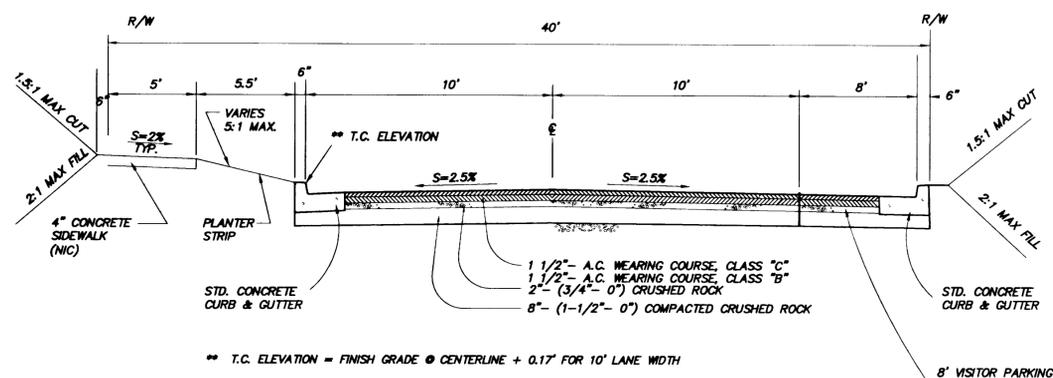
Project: 98014
 Designed: MC
 Drawn: MC
 Checked: SBT
 Date: 3/16/99

5 of **19**



STREET AND STORM LINE 'A' PROFILE

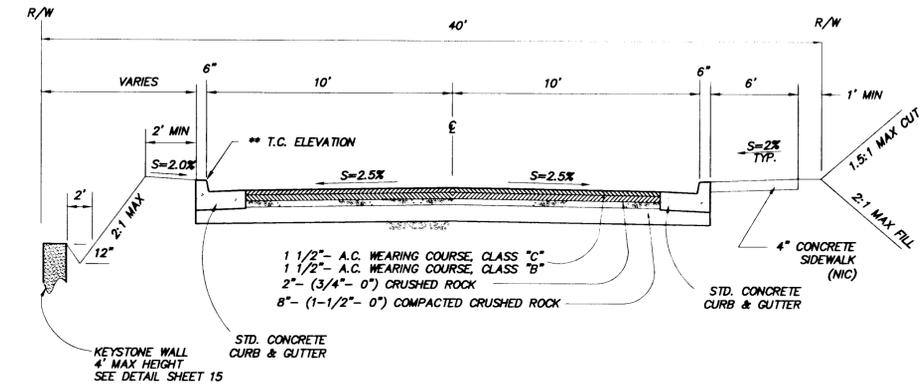
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



A ST. MORITZ LOOP SECTION [STATION 0+49.68 TO 2+92.15]
NOT TO SCALE

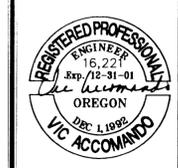
AS-BUILT

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B TYPICAL ST. MORITZ LOOP SECTION [STATION 2+92.15 TO 3+66.08]
NOT TO SCALE

NO.	DATE	DESCRIPTION
6	02/12/01	AS-BUILT W/LAP
5	03/01/01	REVISED AS-BUILT
4	2/21/01	REVISED AS-BUILT
3	10/13/00	REVISED AS-BUILT
2	P.K. 4/25/00	AS-BUILT

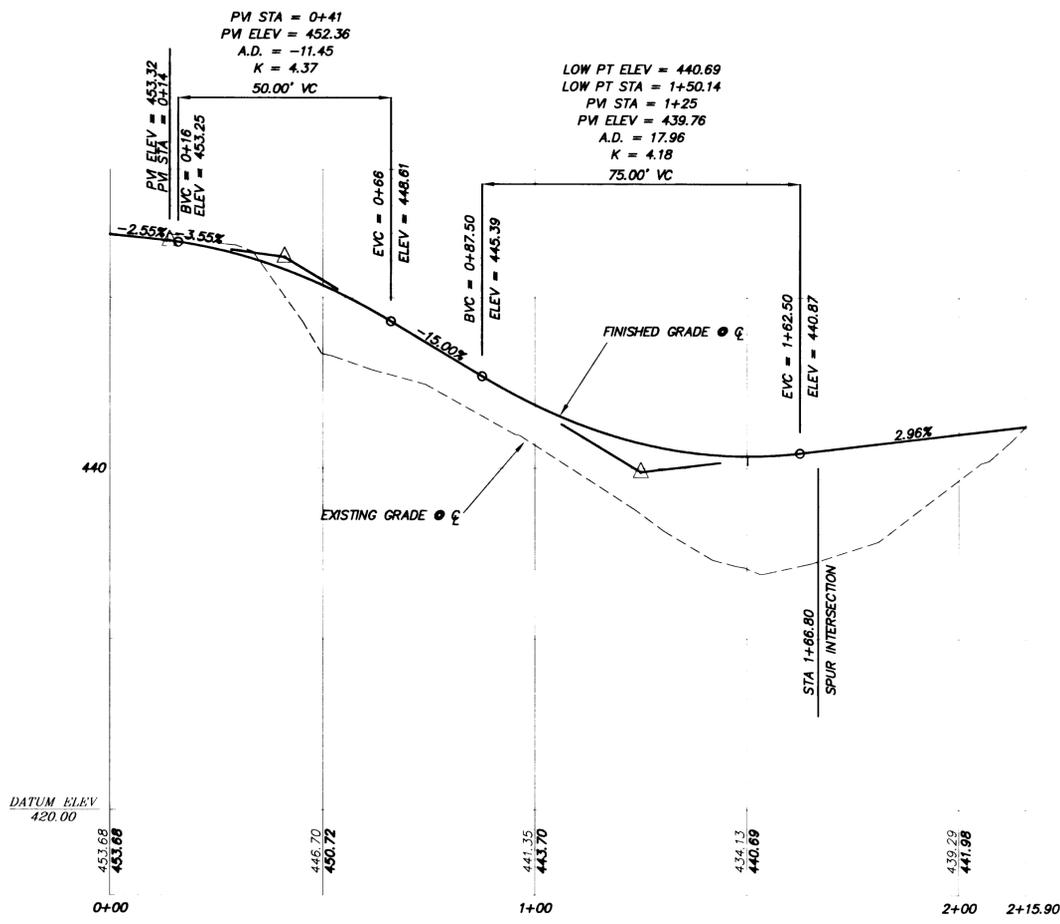


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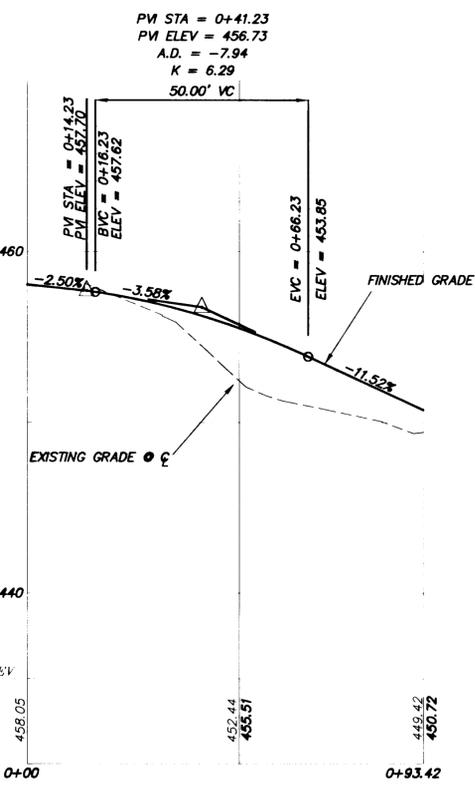
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STREET & STORM PROFILE
RENAISSANCE VILLAS
BLAND CIRCLE
WEST LINN, OR

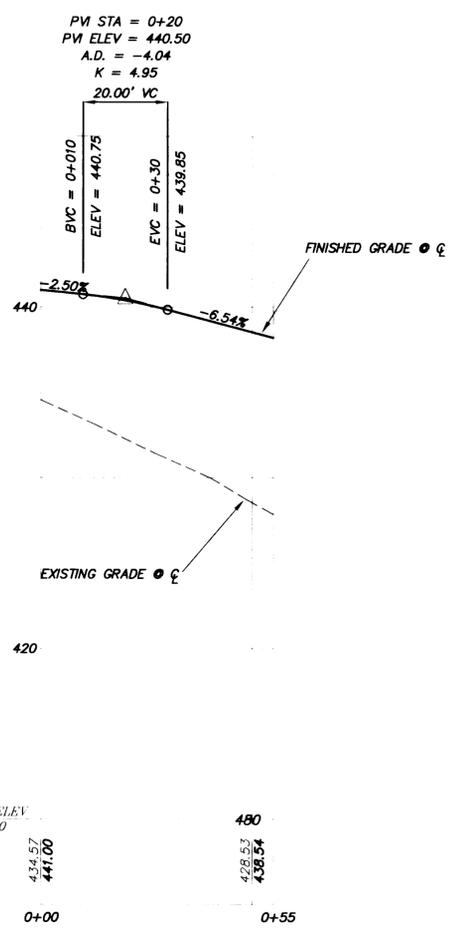
Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SRT
Date	8/10/99



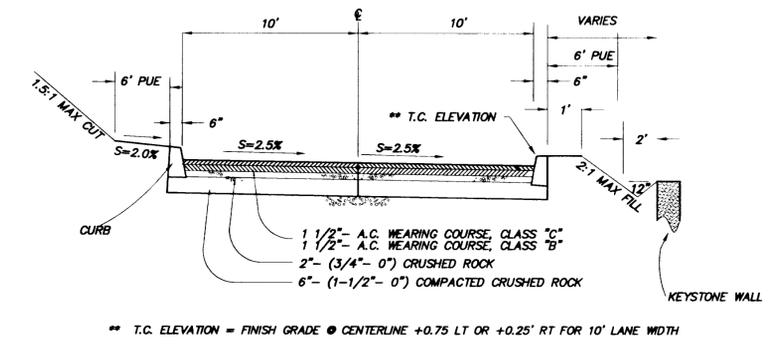
MATTERHORN COURT PROFILE (PVT)
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



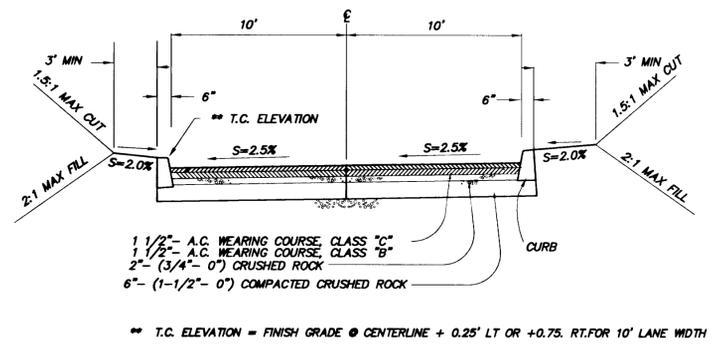
LUCERNE PROFILE (PVT)
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



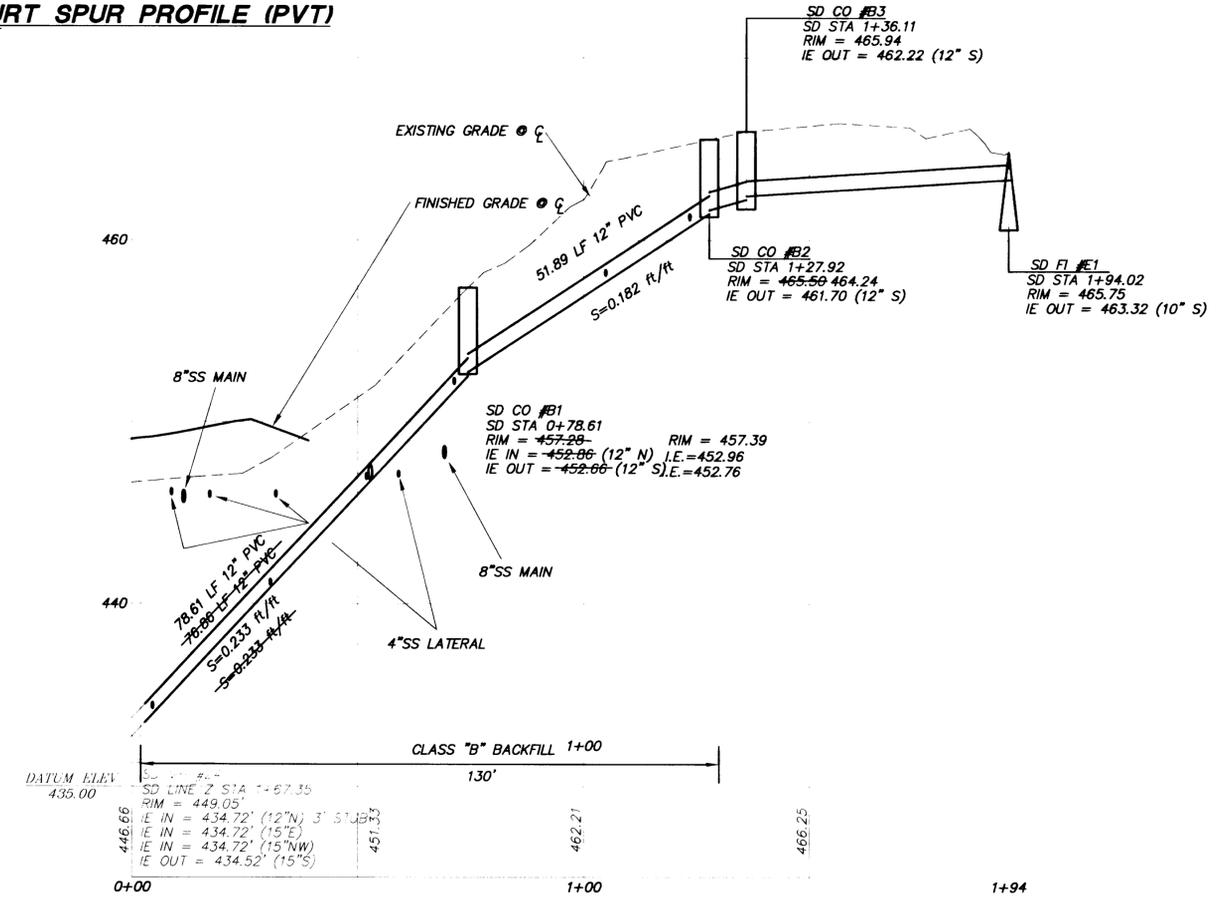
MATTERHORN COURT SPUR PROFILE (PVT)
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



D MATTERHORN COURT + SPUR PRIVATE SECTION
NOT TO SCALE



C LUCERNE PLACE PRIVATE SECTION
NOT TO SCALE



STORM LINE "B" PROFILE (PVT)
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

NO.	BY	DATE	DESCRIPTION
1	P.K.	4/25/04	AS-BUILTS
2	CWQ	10/13/08	REVISED AS-BUILTS
3	CWQ	2/21/01	REVISED AS-BUILTS
4	CWQ	03/01/01	REVISED AS-BUILTS
5	CWQ	03/13/01	AS-BUILTS MYLAR



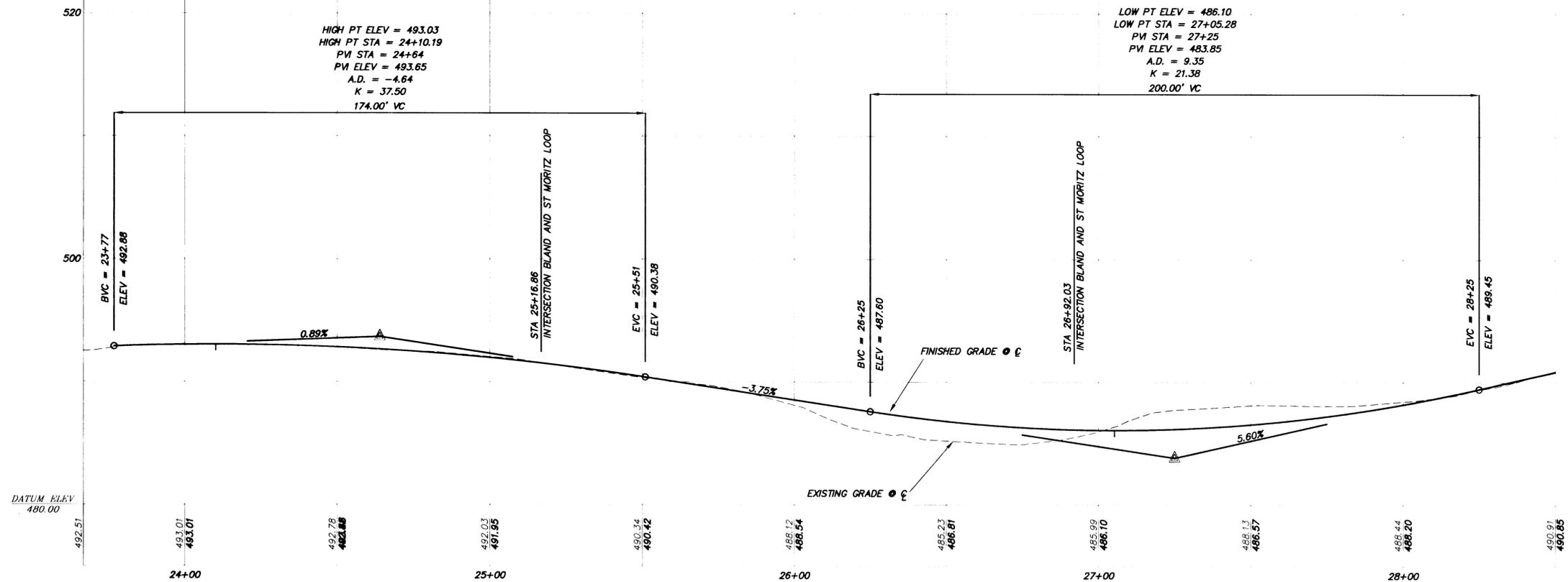
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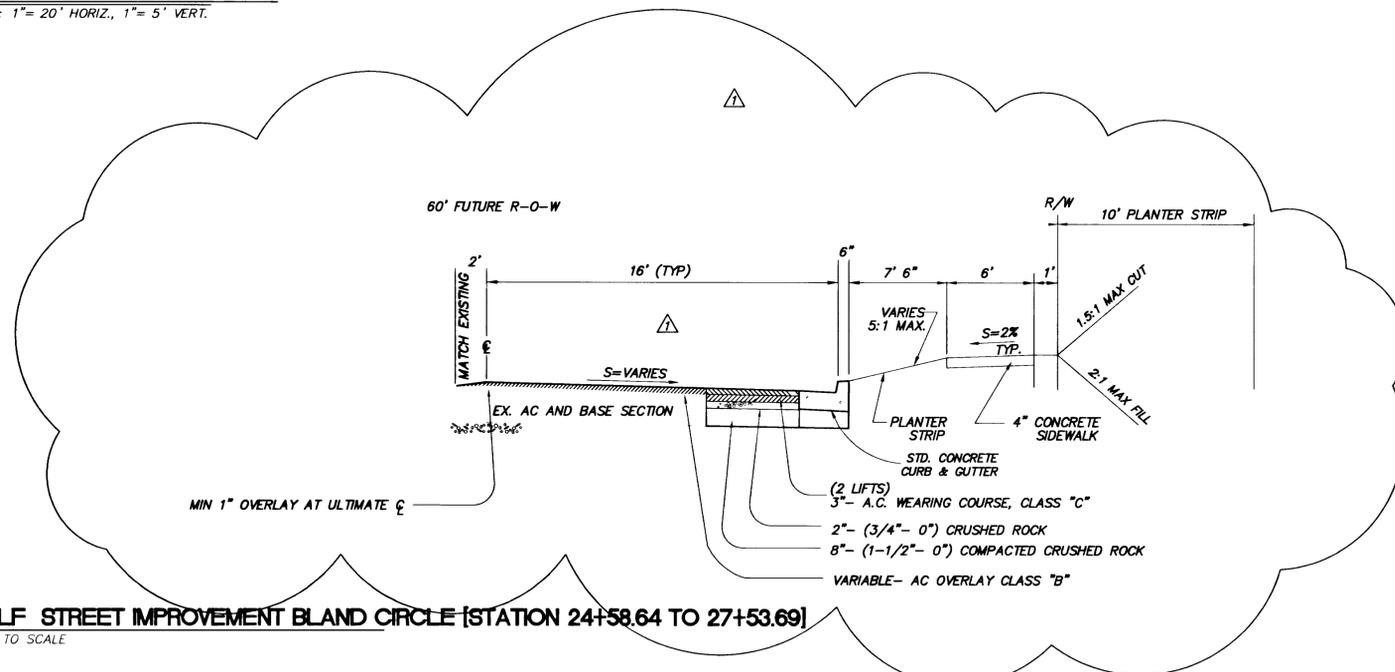
STREET & STORM PROFILES
RENAISSANCE VILLAS
BLAND CIRCLE
WEST LINN, OR

Project: 98014
Designed: CWQ
Drawn: CWQ
Checked: SBT
Date: 8/10/99



BLAND CIRCLE PROFILE

SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

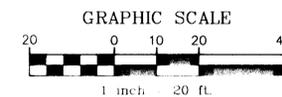


HALF STREET IMPROVEMENT BLAND CIRCLE [STATION 24+58.64 TO 27+53.69]

NOT TO SCALE

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



NO.	BY	DATE	DESCRIPTION
6	CWQ	03/13/01	AS-BUILTS MYLAR
5	CWQ	02/01/01	REVISED AS-BUILTS
4	CWQ	2/27/01	REVISED AS-BUILTS
3	CWQ	10/13/00	REVISED AS-BUILTS
2	P.K.	4/25/00	AS-BUILTS



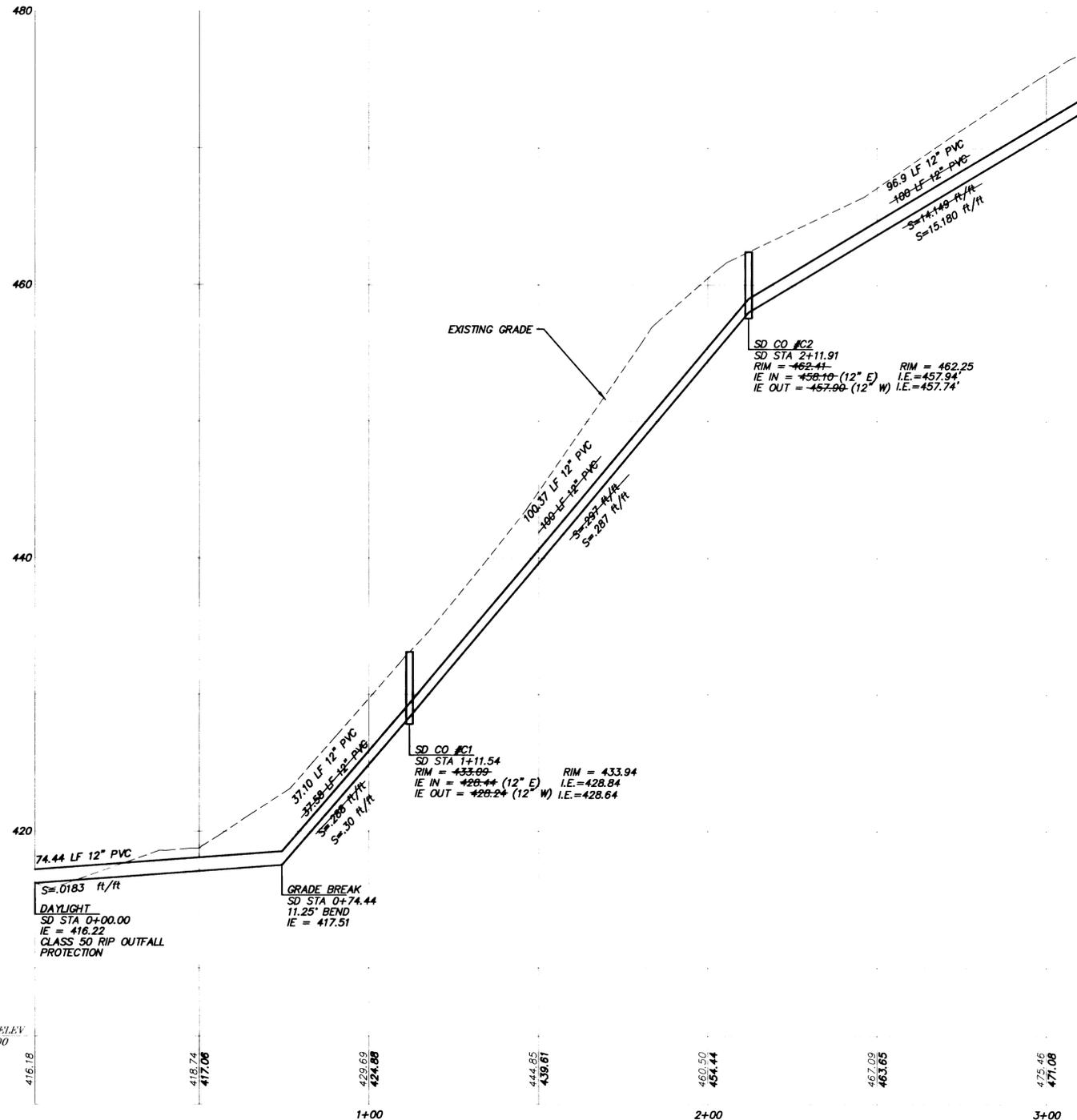
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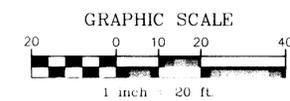
BLAND CIRCLE PROFILE
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	8/10/99



STORM DRAIN LINE C
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

AS-BUILT
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



NO	BY	DATE	DESCRIPTION
5	CWQ	04/13/01	AS-BUILTS M.F.A.P.
4	CWQ	03/01/01	REVISED AS-BUILTS
3	CWQ	2/21/01	REVISED AS-BUILTS
2	CWQ	10/13/00	REVISED AS-BUILTS
1	P.K.	4/29/00	AS-BUILTS



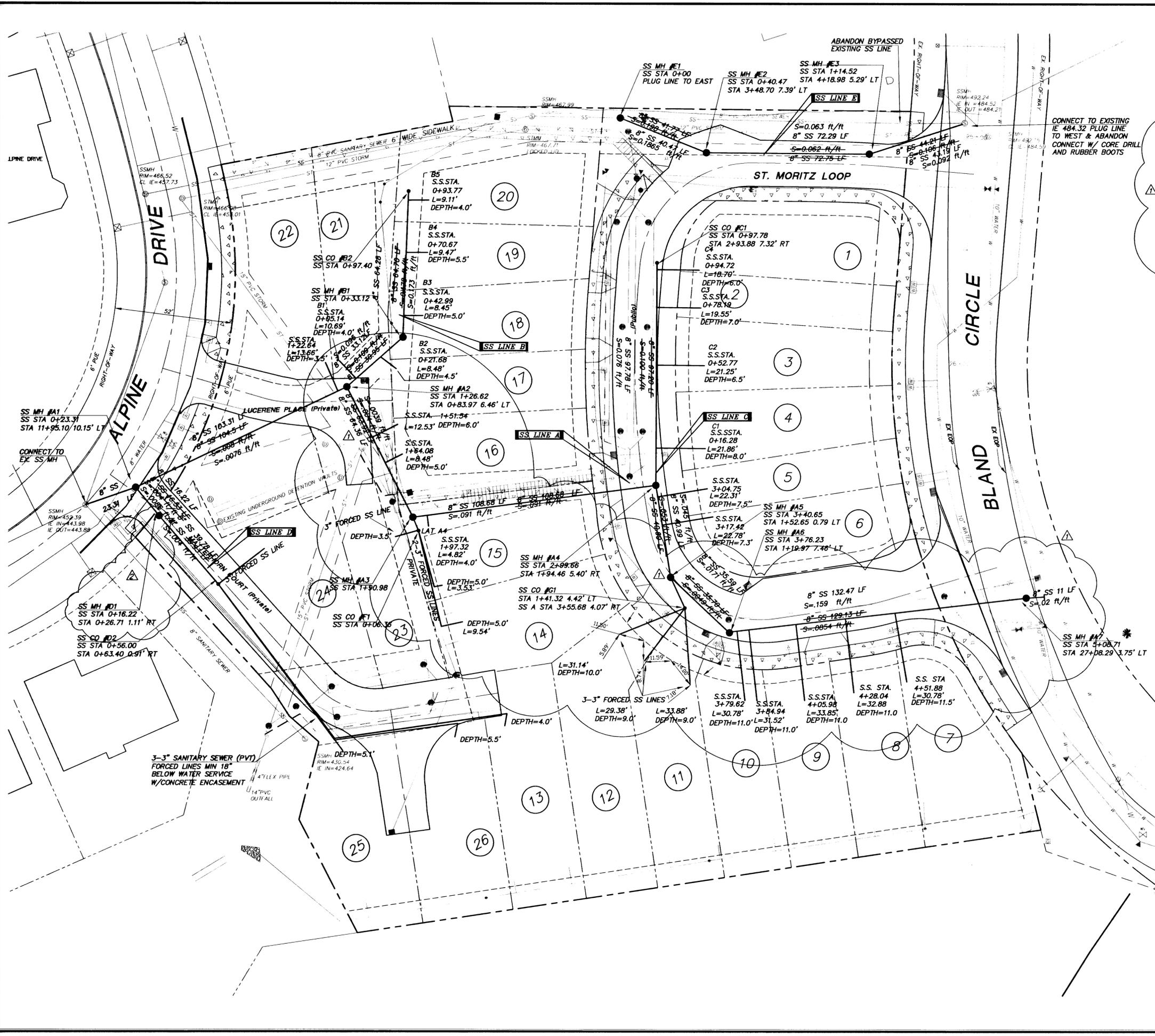
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PRIVATE
STORM DRAIN LINE C
RENAISSANCE VILLAS
BLAND CIRCLE
WEST LINN, OR

Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	8/10/99



SS LINE A LATERALS

LAT.	SS STA	I.E. @ MAIN	OFFSET	END IE
A1	1+22.64	445.33	10.50'	445.54
A2	1+51.54	445.61	14.05'	445.89
A3	1+64.08	445.69	8.38'	445.86
A4	1+97.32	446.48	7.70'	446.89
A5	3+04.75	456.70	21.43'	457.13
A6	3+17.42	457.48	21.15'	457.90
A11	3+79.62	459.56	27.91'	460.12
A12	3+84.94	460.34	29.85'	460.94
A13	4+05.98	463.84	30.30'	464.45
A14	4+28.04	467.54	29.67'	468.13
A15	4+51.88	471.28	28.50'	471.55

SS LINE B LATERALS

LAT.	SS STA	I.E. @ MAIN	OFFSET	END IE
B1	0+05.14	444.11	10.64'	444.32
B2	0+21.88	446.80	9.43'	446.99
B3	0+42.99	451.21	9.55'	451.40
B4	0+70.67	456.05	10.04'	456.25
B5	0+93.77	459.80	10.41'	460.01

SS LINE C LATERALS

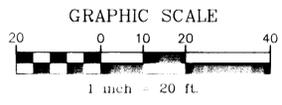
LAT.	SS STA	I.E. @ MAIN	OFFSET	END IE
C1	0+16.28	458.97	20.47'	459.38
C2	0+52.77	462.22	17.93'	462.58
C3	0+78.18	464.15	18.21'	464.51
C4	0+94.72	465.68	19.51'	466.07

NOTE: SANITARY SEWER FOR LOTS 14, 15 AND 23 TO BE PUMPED TO SS CO "F1".
 SANITARY SEWER FOR LOTS 13, 25 AND 26 TO BE PUMPED TO SS CO "D2".
 SANITARY SEWER FOR LOTS 11 AND 12 TO BE PUMPED TO SS CO "G1".

NOTES: NEW PAVEMENT AND REPAIR LIMITS ON BLAND CIRCLE WILL BE VERIFIED BY THE CITY AFTER ALL WATER SYSTEM SA AND ST CONNECTIONS WILL BE COMPLETED

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



NO.	BY	DATE	DESCRIPTION
7	CWQ	03/13/01	AS-BUILTS M.L.R.
6	CWQ	03/09/01	REVISED AS-BUILTS
5	CWQ	2/21/01	REVISED AS-BUILTS
4	CWQ	10/13/00	REVISED AS-BUILTS
3	PK	4/25/00	AS-BUILTS

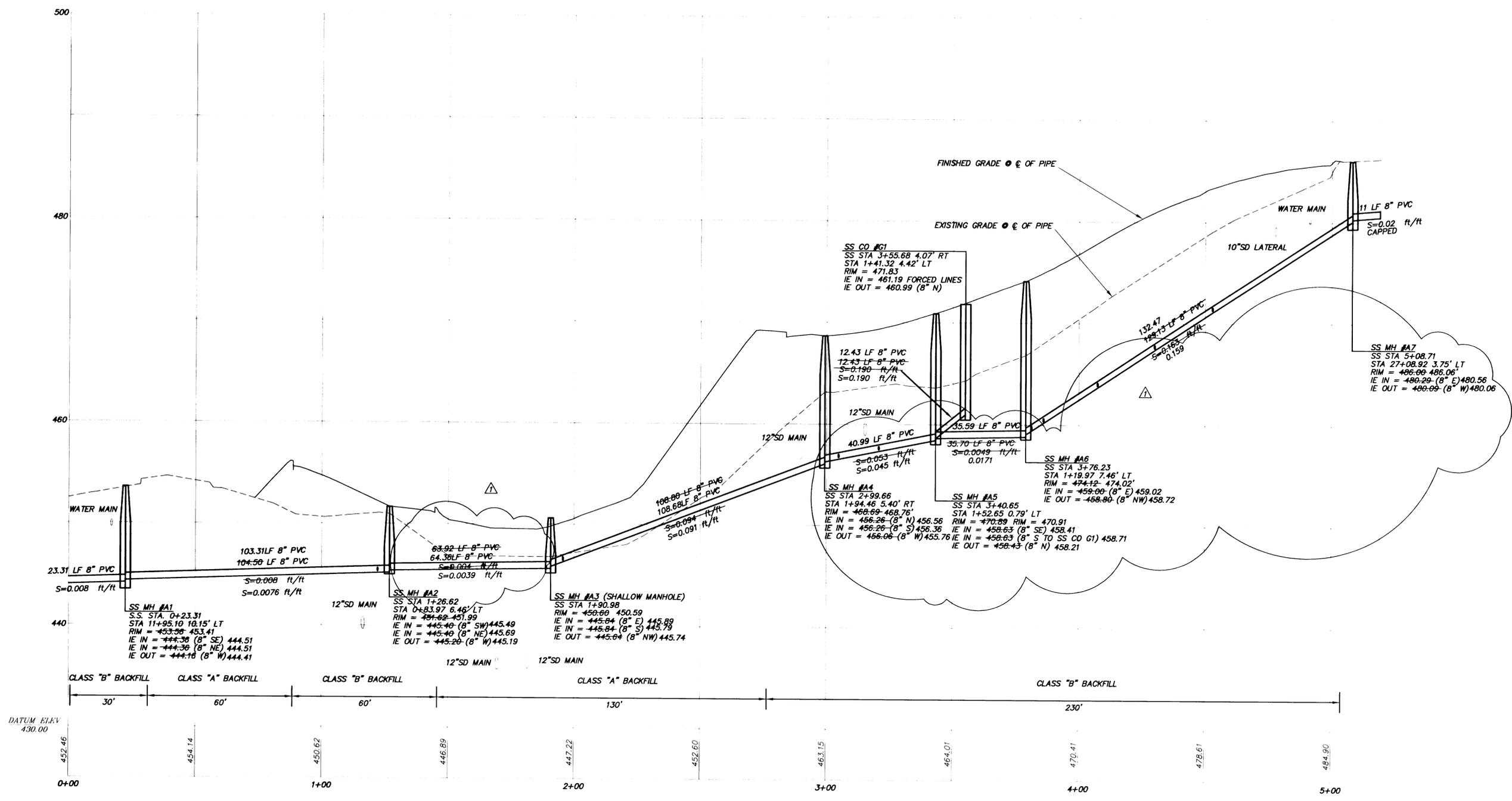


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PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
 1672 WILLAMETTE FALLS DRIVE
 WEST LINN, OR 97068
 PHONE (503) 557-8000
 FAX (503) 656-1601

SANITARY SEWER PLAN
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	8/10/99



SANITARY SEWER LINE "A" PROFILE
 SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

AS-BUILT
 THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

NO.	REVISION	DATE	DESCRIPTION
6	CWO 03/13/01	AS-BUILTS W/LAR	
5	CWO 03/01/01	REVISED AS-BUILTS	
4	CWO 2/21/01	REVISED AS-BUILTS	
3	CWO 10/13/00	REVISED AS-BUILTS	
2	PK 1/25/00	AS-BUILTS	
1			

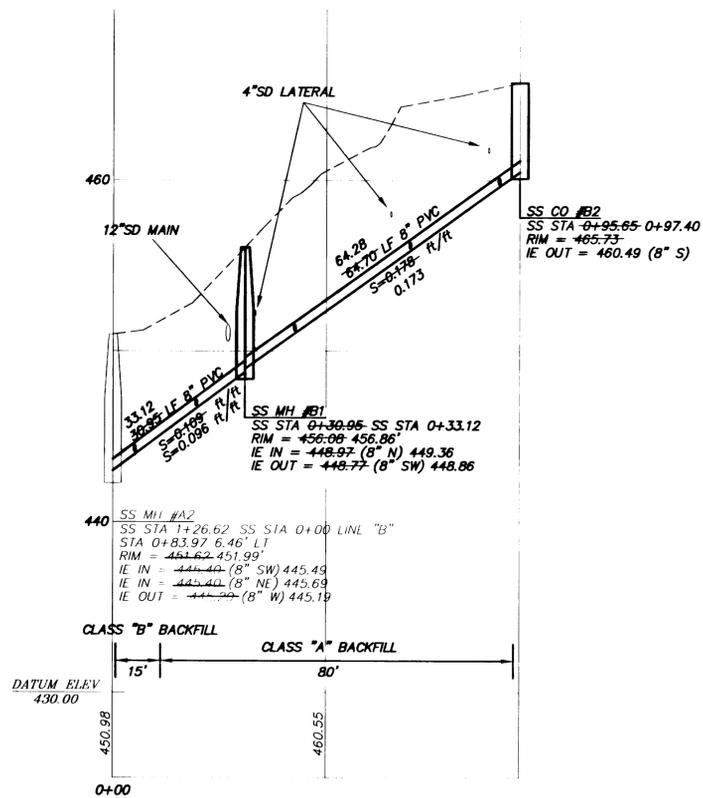


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SS PROFILES
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

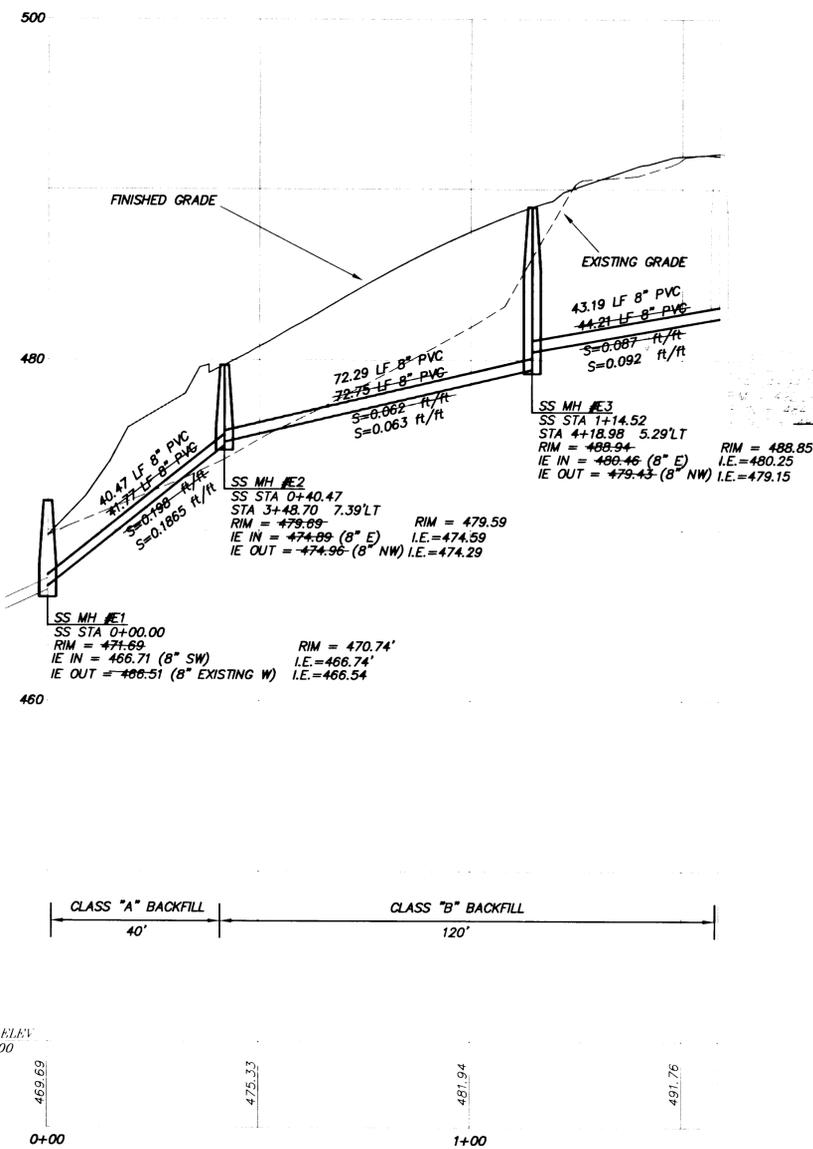
Project	98014
Designed	MC
Drawn	MC
Checked	SBT
Date	8/10/99



SANITARY SEWER LINE "B" PROFILE

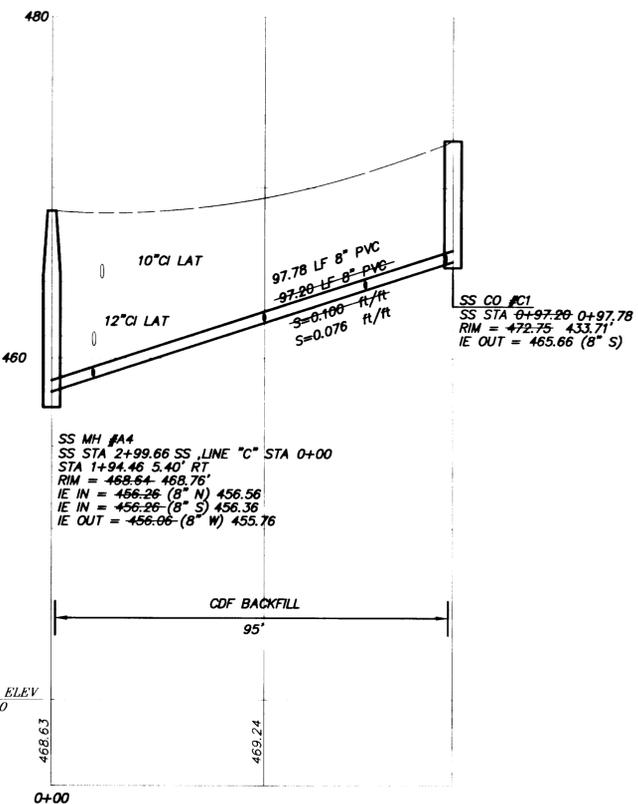
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

NOTE:
 CONTRACTOR TO POT HOLE EXISTING
 SS LINE PRIOR TO CONSTRUCTION
 AND VERIFY EXISTING IE. NOTIFY
 ENGINEER IF CONDITIONS ARE DIFFERENT
 THAN THOSE SHOWN ON THIS PLAN SET.



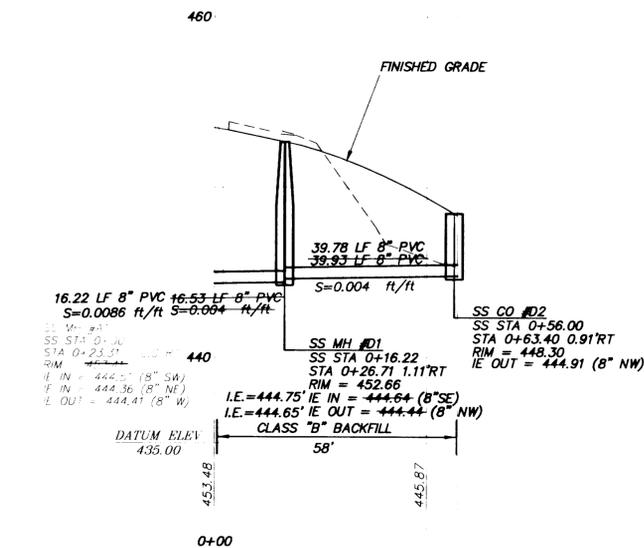
SANITARY SEWER LINE "E" PROFILE

SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



SANITARY SEWER LINE "C" PROFILE

SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



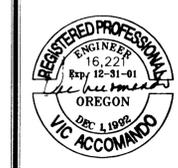
SANITARY SEWER LINE "D" PROFILE

SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

AS-BUILT

THESE AS-BUILT PLANS ARE BASED
 ON PERIODIC FIELD OBSERVATIONS
 AND BY PERFORMING SURVEY
 MEASUREMENTS OF PUBLIC UTILITIES

NO	BY	DATE	DESCRIPTION
1	PK	3/25/00	AS-BUILTS
2			REMOVED AS-BUILTS
3	CWQ	10/13/00	REMOVED AS-BUILTS
4			REMOVED AS-BUILTS
5	CWQ	03/13/01	AS-BUILTS M/LAR



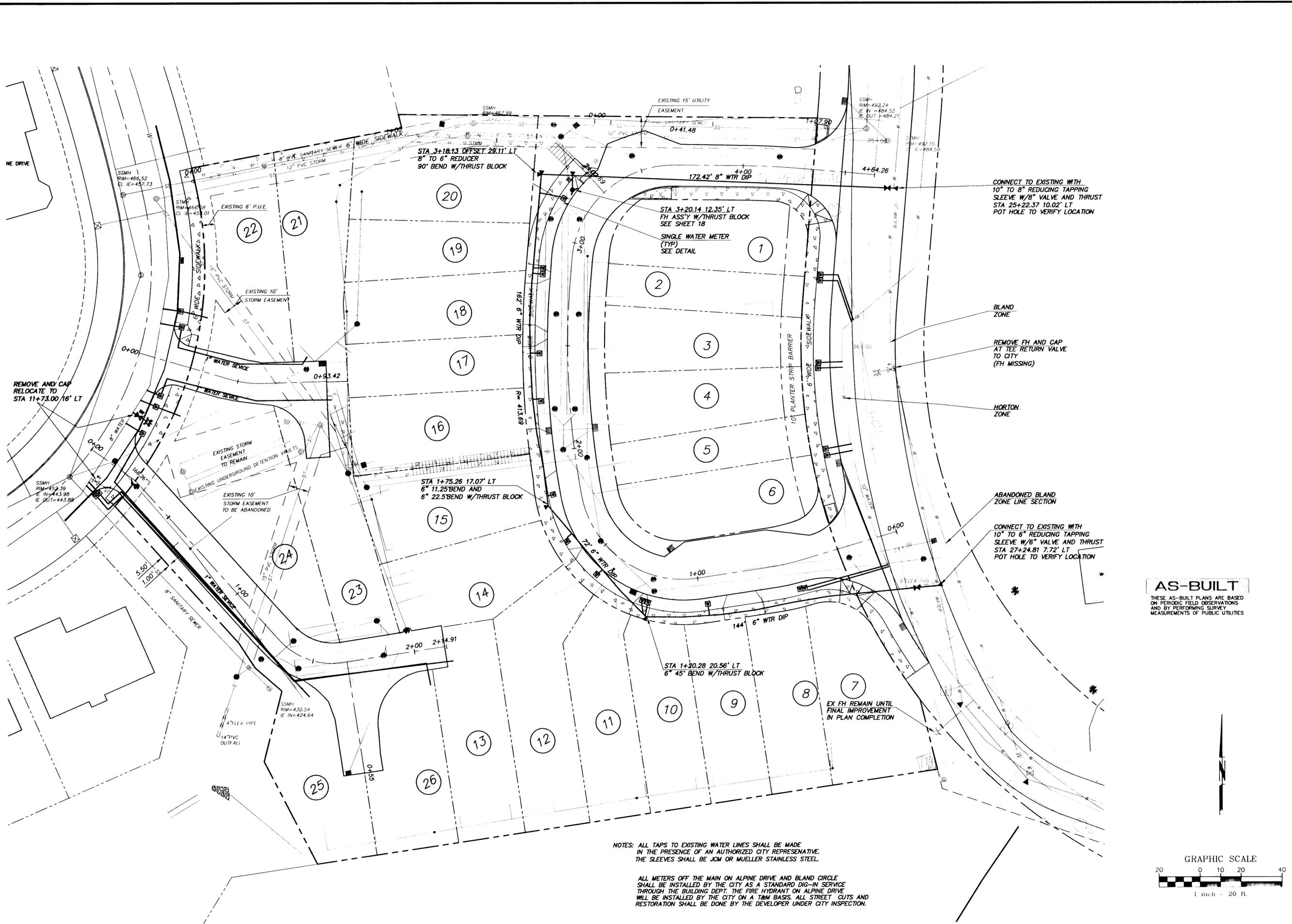
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 FAX (503) 656-1601

SS PROFILES
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

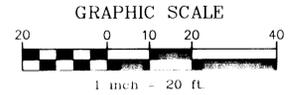
Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	8/10/99



NOTES: ALL TAPS TO EXISTING WATER LINES SHALL BE MADE IN THE PRESENCE OF AN AUTHORIZED CITY REPRESENTATIVE. THE SLEEVES SHALL BE JCM OR MUELLER STAINLESS STEEL.

ALL METERS OFF THE MAIN ON ALPINE DRIVE AND BLAND CIRCLE SHALL BE INSTALLED BY THE CITY AS A STANDARD DIG-IN SERVICE THROUGH THE BUILDING DEPT. THE FIRE HYDRANT ON ALPINE DRIVE WILL BE INSTALLED BY THE CITY ON A T&M BASIS. ALL STREET CUTS AND RESTORATION SHALL BE DONE BY THE DEVELOPER UNDER CITY INSPECTION.

AS-BUILT
 THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



NO.	DATE	DESCRIPTION
1	3/25/00	AS-BUILT
2	10/13/00	REVISED AS-BUILT
3	2/21/01	REVISED AS-BUILT
4	03/01/01	REVISED AS-BUILT
5	03/13/01	AS-BUILT W/LAR

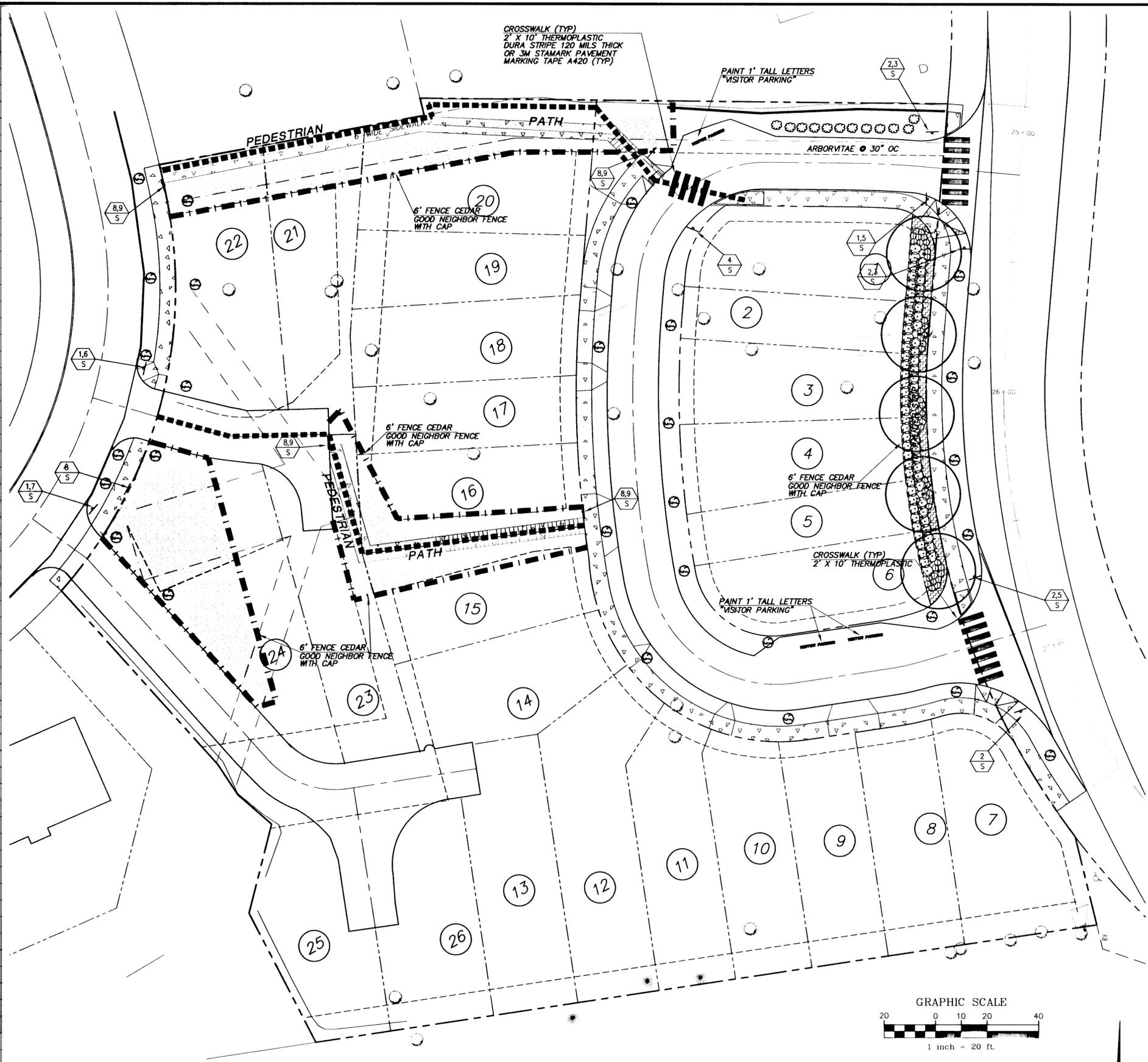


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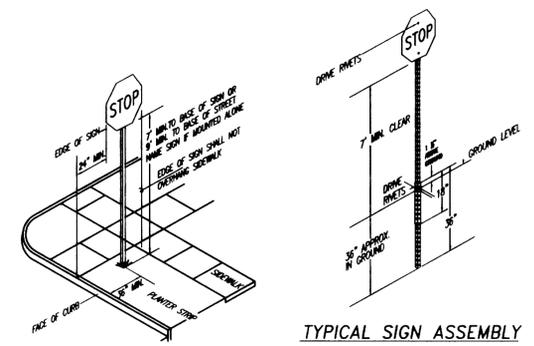
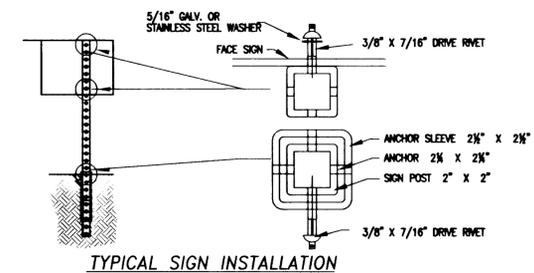
WATER PLAN
 RENAISSANCE VILLAS
 BLAND CIRCLE
 WEST LINN, OR

Project	98014
Designed	MC
Drawn	MC
Checked	SBT
Date	8/10/99



PERMANENT SIGNING LEGEND

- GENERAL SIGNING NOTES:**
- 1) CONTRACTOR SHALL SUPPLY ALL SIGNS. COUNTY OPERATIONS DIVISION WILL NOT SUPPLY ANY SIGNS, SIGN MATERIALS, OR POSTS.
 - 2) ALL SIGNING SHALL CONFORM TO OREGON DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS (LATEST EDITION) AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 3) ALL POSTS SHALL BE PERFORATED TUBULAR POSTS OR "UNISTRUT'S TELESPAR" POSTS UNLESS OTHERWISE SPECIFIED. SEE NOTES UNDER INSTALLATION DETAIL.
 - 4) SIGNS SHALL BE INSTALLED PER THE TYPICAL SIGN INSTALLATION DETAIL UTILIZING THE SPECIFIED HARDWARE.
 - 5) CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING SIGN LOCATIONS AND OBTAINING UTILITY LOCATES FOR STAKED SIGN LOCATIONS. SIGNS SHALL BE LOCATED PER THE TYPICAL SIGN LOCATION OR AS SHOWN ON THE PLANS.



POSTS

A MINIMUM OF 2 X 2-INCH X 10-FOOT GALVANIZED "UNISTRUT'S TELESPAR" OR 12-GAUGE PERFORATED POSTS, OR APPROVED EQUIVALENT SHALL BE USED.

A 2 X 2-INCH X 12-FOOT (MIN.) 14-GAUGE GALVANIZED "UNISTRUT'S TELESPAR" OR 12-GAUGE PERFORATED POSTS, OR APPROVED EQUIVALENT SHALL BE USED WHEN A COMBINATION OF SIGNS IS MORE THAN 36 INCHES IN HEIGHT. SIGN POST IS 2-INCH SQUARE TUBING AND MUST BE EMBEDDED A MINIMUM OF 12 INCHES INTO THE BASE.

ROUND METAL POSTS WILL NOT BE PERMITTED. WOOD POSTS MAY BE USED ONLY WITH PRIOR APPROVAL OF THE COUNTY ROAD ENGINEER AND MUST BE CONFIGURED AND DRILLED FOR BREAKAWAY AS PER ODOT SPECIFICATIONS.

PERMANENT SIGNING LEGEND

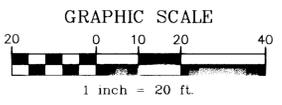
- (N) INSTALL NEW SIGN
 - (N M) INSTALL NEW SIGN (N) ON NEW (M) SUPPORT
 - (RN) REMOVE EXISTING SIGN (N)
 - (RN M) REMOVE EXISTING SIGN (N) AND (M) SUPPORT
 - (RN M) REINSTALL SIGN (N) ON NEW (M) SUPPORT
 - (EN) MAINTAIN AND PROTECT EXISTING SIGN (N) AND SUPPORT
 - (RN) REINSTALL EXISTING SIGN ON EXISTING SUPPORT
- N = SIGN NUMBER
M = MATERIALS, OPTIONS ARE:
S = STEEL "TELESPAR"
- ◆ SIGNS SHOWN WITH BROKEN BORDERS ARE EXISTING.

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

PLANT LEGEND

SYMBOL	PLANT NAME	QUANTITY	SIZE	CONDITION
(1)	Acer rubrum 'Red Sunset' Red Sunset Maple	5	2" CAL	B4B
(2)	Berberis thun. atro. 'Crimson Pygmy' Crimson Pygmy Barberry	43	1 GAL	CONT.
(3)	Prunus laetiana Portuguese Laurel	71	5 GAL	CONT.
(4)	Arctostaphylos uva-urei Kinnick Kinnick	EST.	1 GAL	24" TRI-SPACE
(5)	Thuja occidentalis 'Emerald' Emerald Green Arborvitae	20	4-5'	• 30" OC



LEGEND

PROPOSED STREET TREE (Typ.)

R1-1 30" X 30" 3 REQUIRED SIGN 1	R6-2 18" X 24" 4 REQUIRED SIGN 2	R5-1 30" X 30" 1 REUSED SIGN 3	W11A-2 30" X 30" 1 REUSED SIGN 4	24" ST. MORITZ LP TYPE D3 2 SIDED 2 REQUIRED SIGN 5	24" LUCERNE PL. TYPE D3 2 SIDED 1 REQUIRED SIGN 6	24" MATTERHORN CT. TYPE D3 2 SIDED 1 REQUIRED SIGN 7	R6-2 18" X 24" 4 REQUIRED SIGN 8	R6-2 18" X 24" 4 REQUIRED SIGN 9
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NO.	DATE	BY	DESCRIPTION
5	03/13/01	AS-BUILTS M/LAR	
4	02/01/01	REVISED AS-BUILTS	
3	2/21/01	REVISED AS-BUILTS	
2	10/13/00	REVISED AS-BUILTS	
1	3/29/00	AS-BUILTS	



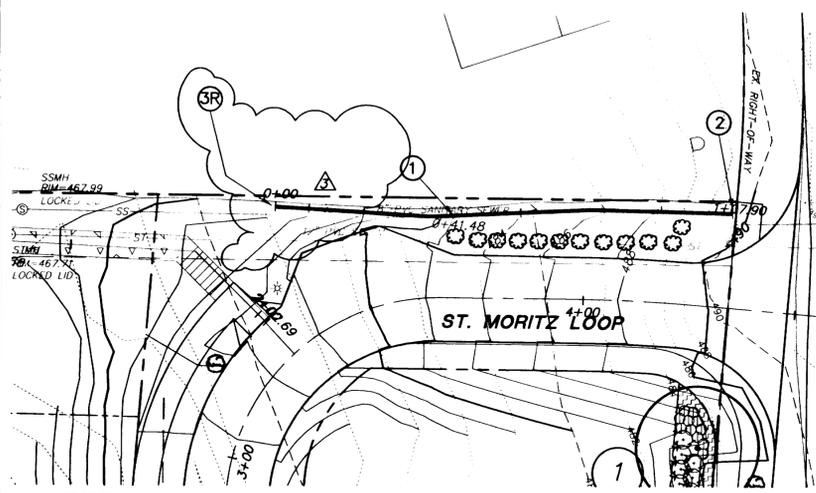
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FAX (503) 656-1601

STREET TREE AND SIGN PLAN
RENAISSANCE VILLAS
BLAND CIRCLE
WEST LINN, OR

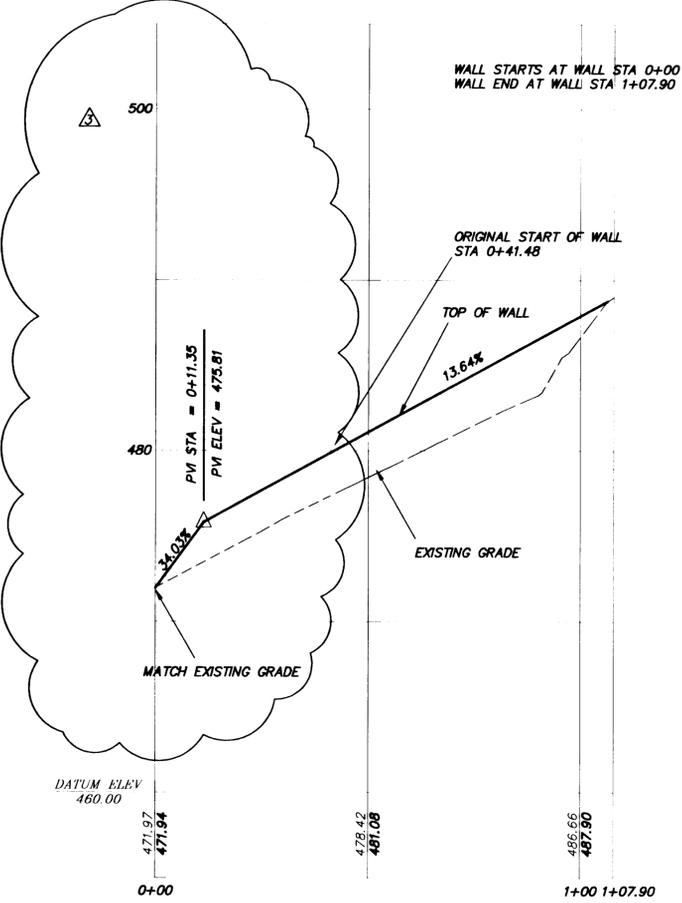
Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	2/23/00



RETAINING WALL "A"

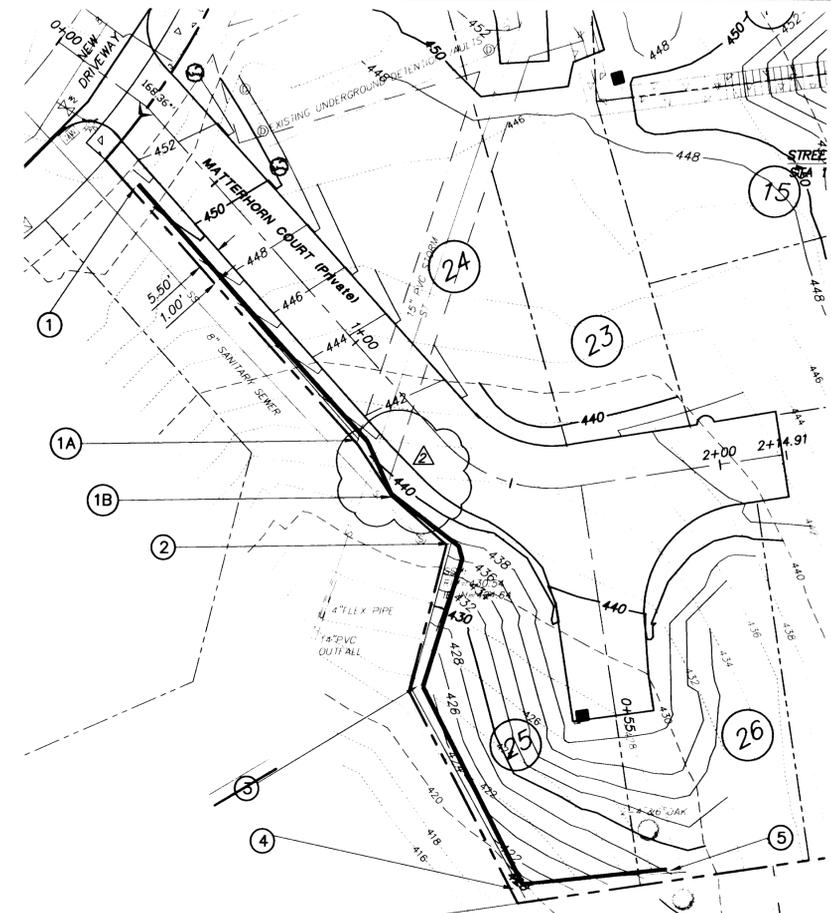
SCALE: 1" = 20'

- CONSTRUCTION NOTES:**
- ① START WALL
STA: 3+65.91
OFFSET: 22.15' LT
WALL STA 0+41.48
 - ② END WALL
STA: 4+33.32 WALL STA 1+07.90
OFFSET: 23.39' LT
 - SR NEW STARTOF WALL
STA: 3+39.24
OFFSET: 29.68' LT
WALL STA 0+00



RETAINING WALL "A" PROFILE

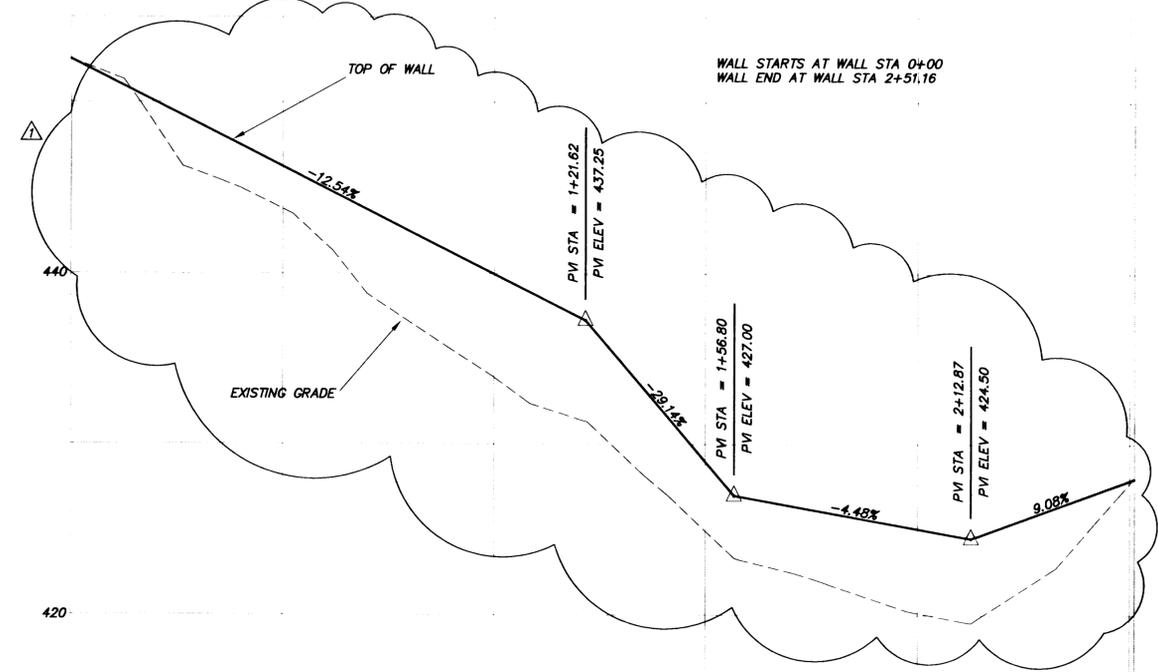
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



RETAINING WALL "B"

SCALE: 1" = 20'

- CONSTRUCTION NOTES:**
- ① START WALL
STA: 0+38.16'
OFFSET: 13.73' RT
WALL STA 0+00
 - 1A ANGLE POINT
STA: 1+19.22'
OFFSET: 13.44' RT
 - 1B ANGLE POINT
STA: 1+31.50'
OFFSET: 17.48' RT
 - ② ANGLE POINT
STA: 1+44.82'
OFFSET: 18.24' RT
 - ③ ANGLE POINT
STA: 1+47.19'
OFFSET: 51.97' RT
 - ④ ANGLE POINT
STA: 1+57.81'
OFFSET: 99.98' RT
 - ⑤ END WALL
STA: 1+73.26'
OFFSET: 91.88' RT
WALL STA 2+51.16'



RETAINING WALL "B" PROFILE

SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



RETAINING WALL "B" PROFILE

SCALE: 1" = 20' HORIZ., 1" = 5' VERT.



CONSTRUCTION NOTES:

- ① START WALL
STA: 0+38.16'
OFFSET: 13.73' RT
WALL STA 0+00
- 1A ANGLE POINT
STA: 1+19.22'
OFFSET: 13.44' RT
- 1B ANGLE POINT
STA: 1+31.50'
OFFSET: 17.48' RT
- ② ANGLE POINT
STA: 1+44.82'
OFFSET: 18.24' RT
- ③ ANGLE POINT
STA: 1+47.19'
OFFSET: 51.97' RT
- ④ ANGLE POINT
STA: 1+57.81'
OFFSET: 99.98' RT
- ⑤ END WALL
STA: 1+73.26'
OFFSET: 91.88' RT
WALL STA 2+51.16'

RETAINING WALL NOTES

1. RETAINING WALLS SHALL BE KEystone WALL AS APPROVED BY THE OWNER. THE CONTRACTOR SHALL SUBMIT A WALL SYSTEM TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO SUBMITTING TO THE CITY FOR FINAL APPROVAL.
2. RETAINING WALL DESIGN AND CALCULATIONS SHALL BE PROVIDED BY THE CONTRACTOR. THE DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OREGON.
3. THE WALL SYSTEM AND WALL DESIGN SHALL BE REVIEWED BY THE CITY.
4. DESIGN PARAMETERS AND SOILS INFORMATION CONTAINED IN GEOTECH REPORT DONE BY FUJITANI AND HILTS. THIS CAN BE PROVIDED TO THE WALL DESIGNERS.

NO.	BY	DATE	DESCRIPTION
1	CWQ	03/13/01	AS-BUILT W/LAR
2	CWQ	03/13/01	REVISED AS-BUILT
3	CWQ	03/13/01	REVISED AS-BUILT
4	CWQ	03/13/01	REVISED AS-BUILT
5	CWQ	03/13/01	REVISED AS-BUILT
6	CWQ	03/13/01	REVISED AS-BUILT
7	CWQ	03/13/01	REVISED AS-BUILT
8	CWQ	03/13/01	REVISED AS-BUILT

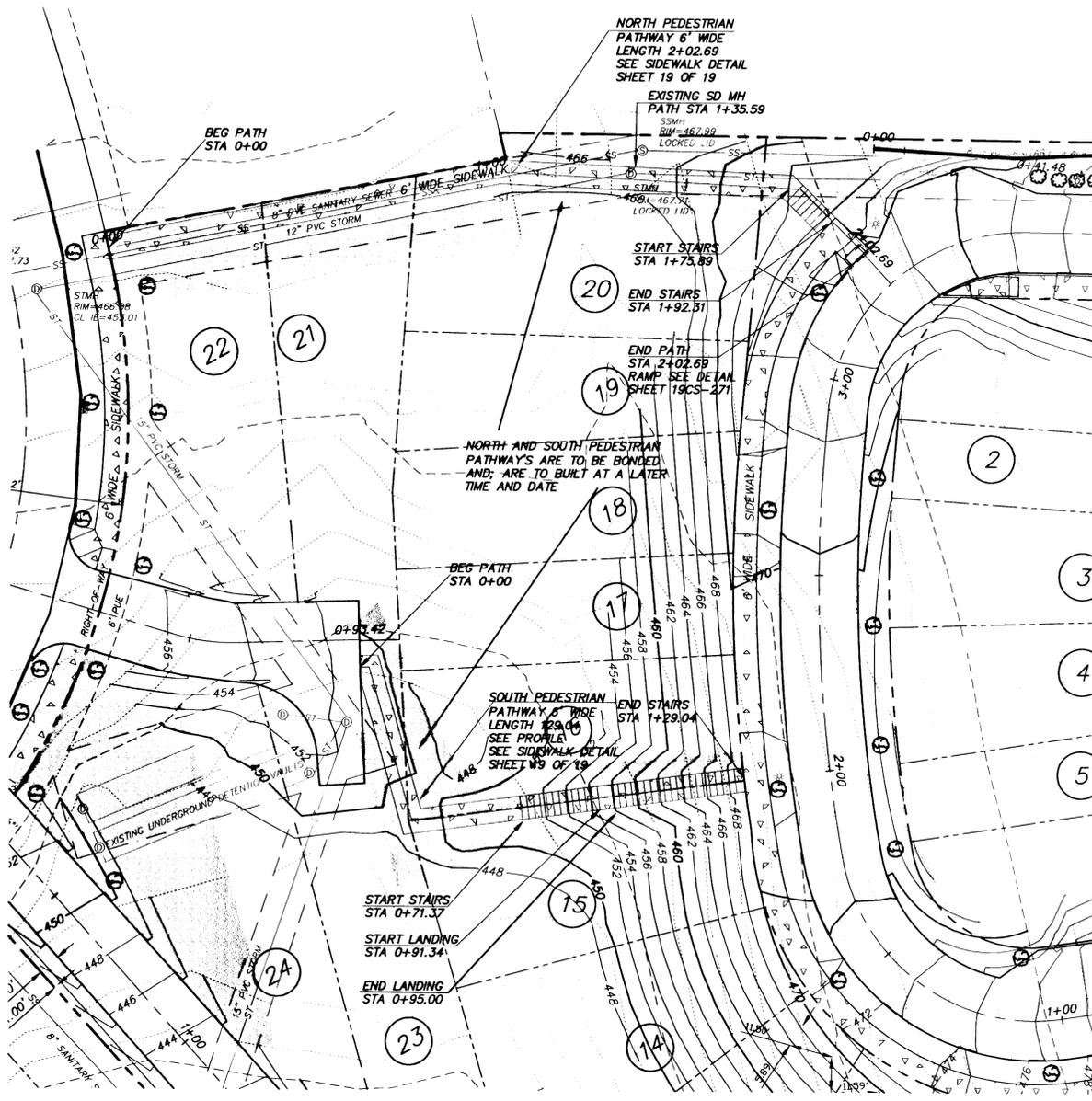


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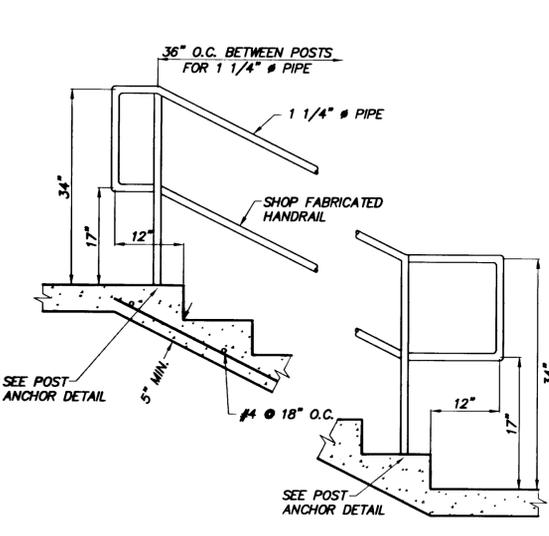
PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
 1672 WILLAMETTE FALLS DRIVE
 WEST LINN, OR 97068
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 FAX (503) 666-1001

RENAISSANCE VILLAS WALL DETAILS
 BLAND CIRCLE
 WEST LINN, OREGON

Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SBT
Date	8/10/99

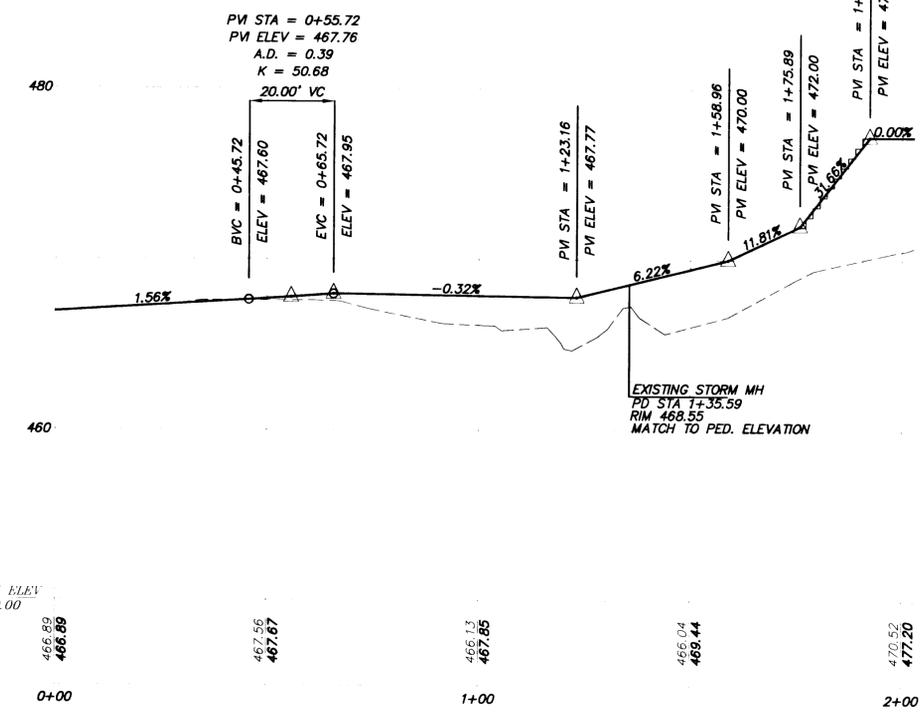
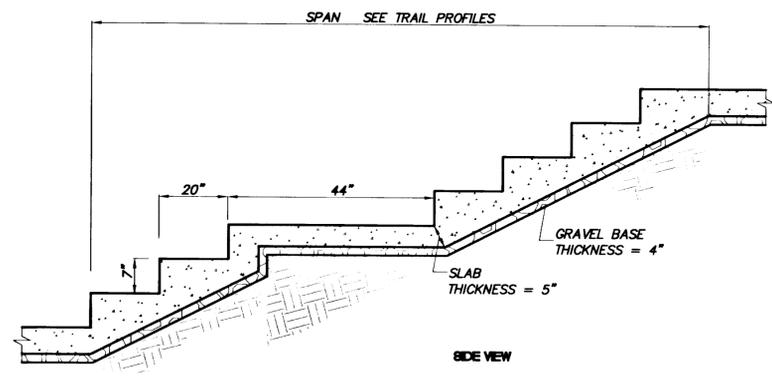


PEDESTRIAN TRAILS PLAN
SCALE: 1" = 20'



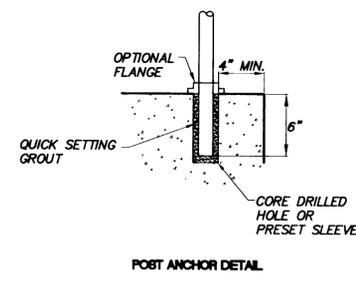
CONCRETE STAIRWAY DETAILS
NO SCALE

NOTE:
CONCRETE TO BE 3000 PSI.
STRUCTURAL STEEL $F_y=60$ KSI.
SCORING EVERY 6"
FIBER CONTROL JOINT 24"
HANDRAIL PIPE ASTM A500 GRADE B
NON-SHRINK QUICK SETTING GROUT
ALL SURFACES TO BE
BROOM FINISHED.

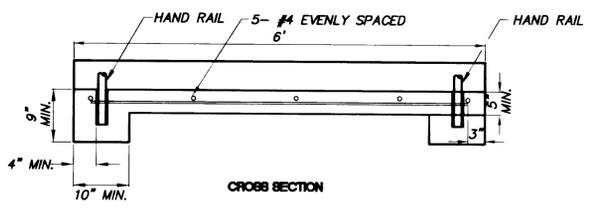


PEDESTRIAN TRAIL NORTH PROFILE
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

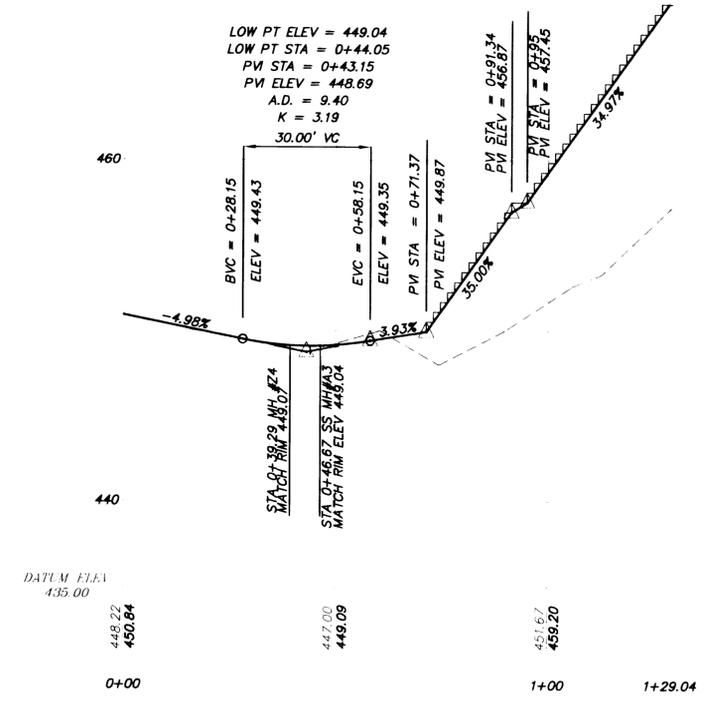
RECREATIONAL SPACE TOTAL 9,772 sq.ft.



AS-BUILT
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HAND RAIL DETAILS FOR CONCRETE STAIRS
NO SCALE



PEDESTRIAN TRAIL SOUTH PROFILE
SCALE: 1" = 20' HORIZ., 1" = 5' VERT.

NO.	BY	DATE	DESCRIPTION
5	CWQ	03/13/01	AS-BUILT'S M/LAR
4	CWQ	03/01/01	REVISED AS-BUILT'S
3	CWQ	2/21/01	REVISED AS-BUILT'S
2	CWQ	10/13/00	REVISED AS-BUILT'S
1	P.K.	4/25/00	AS-BUILT'S



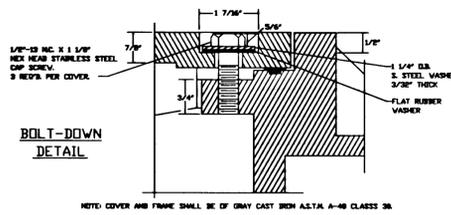
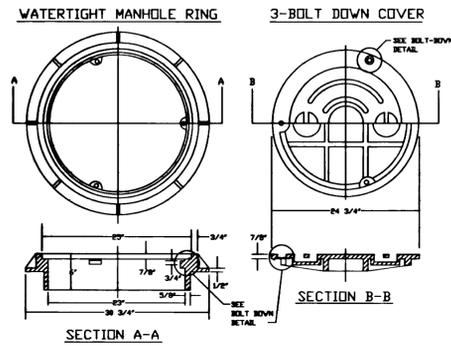
TRILAND DESIGN GROUP, INC.
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FAX: (503) 666-1601

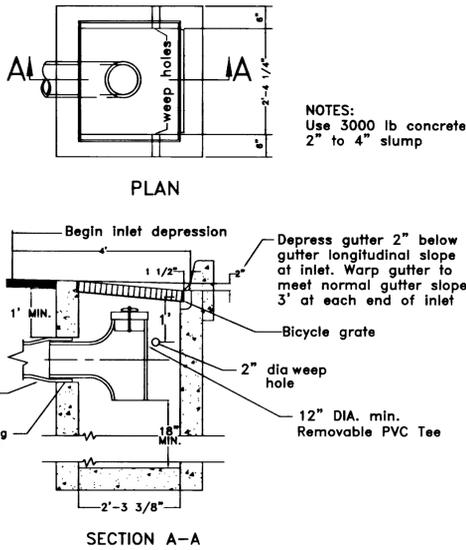
RENAISSANCE VILLAS PEDESTRIAN PATHWAY DETAILS
BLAND CIRCLE
WEST LINN, OREGON

Project	98014
Designed	CWQ
Drawn	CWQ
Checked	SRT
Date	8/10/99



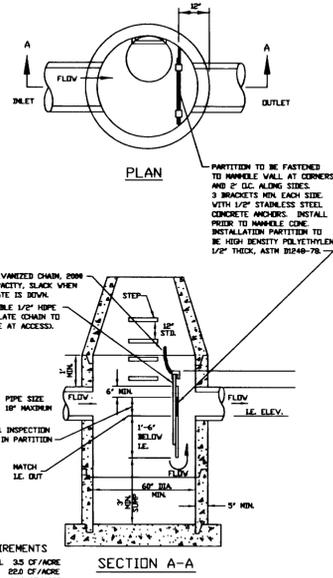
MANHOLE FRAME & COVER
NOT TO SCALE

TRAPPED CATCH BASINS

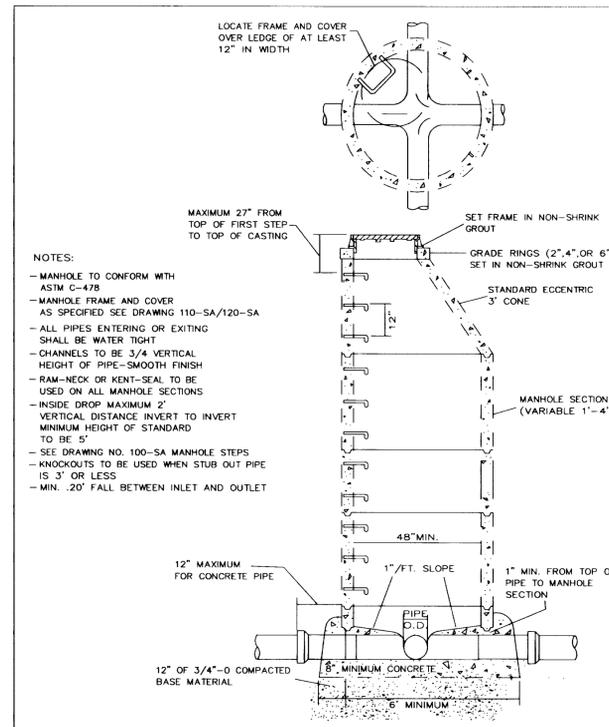


- NOTE: 1. Trapped Catch Basins required in parking lots; use either elbow or baffles (see drawing No SWM-0003).
2. GB-2 Catch Basin required.
3. GB & GB-1 Catch Basins not acceptable.

TRAPPED CATCHBASIN, ELBOW (Private)
NOT TO SCALE CB #5 & #6



8 POLLUTION CONTROL MANHOLE SD MH #A1
NOT TO SCALE

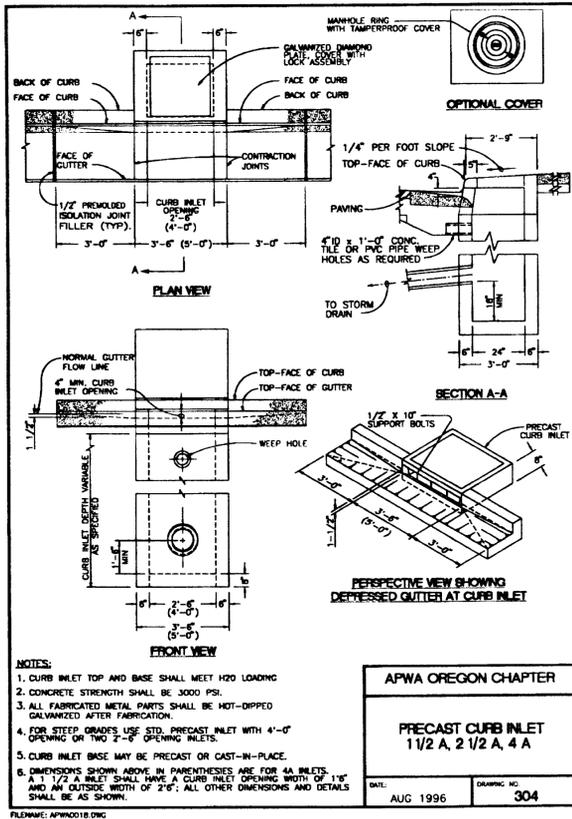


STANDARD MANHOLE MH-209

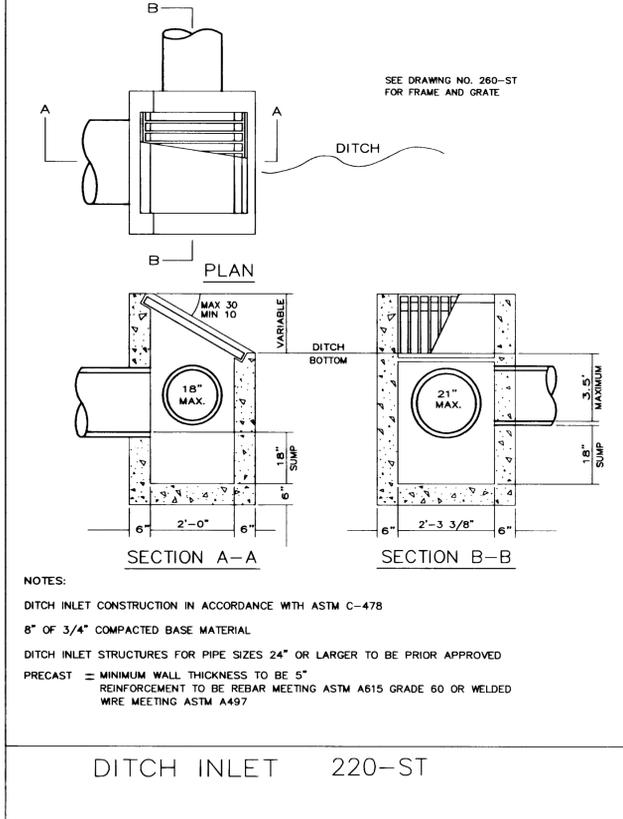
FOR CONSTRUCTION OF MANHOLES OVER EXISTING LINES THE FOLLOWING NOTES APPLY

- FOR CONC. PIPE, PIPE SHALL BE CLEANED, THEN CONCRETE BONDING AGENT SHALL BE APPLIED TO ALL SURFACES THAT WILL BE IN CONTACT WITH THE MANHOLE.
- ON PVC PIPE A DENSE COAT OF CLEAR MORTAR SAND SHALL BE APPLIED WITH PVC SOLVENT CEMENT. WHEN THE CEMENT HAS CURED, CONCRETE BONDING AGENT SHALL BE APPLIED AS NOTE #1.
- THE BASE OF THE NEW MANHOLE SHALL BE POURED IN PLACE OVER 6" OF 3/4"-0" ROCK BEDDING.
- THE TOP OF THE PIPE SHALL BE BROKEN OUT AT SPRING LINE AND THE PIPE EDGE SMOOTHED AFTER CONSTRUCTING THE BASE.

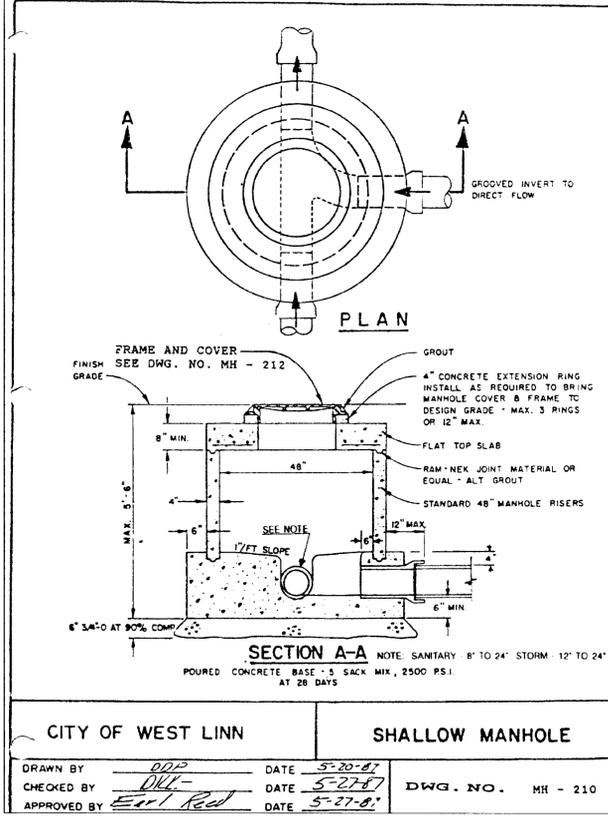
AS-BUILT
THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



APWA OREGON CHAPTER
PRECAST CURB INLET
1 1/2 A, 2 1/2 A, 4 A
DATE: AUG 1996 DRAWING NO: 304



DITCH INLET 220-ST



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

5	CWQ	03/13/01	AS-BUILT MYLAR		
4	CWQ	03/01/01	REVISED AS-BUILT		
3	CWQ	2/20/01	REVISED AS-BUILT		
2	CWQ	10/13/00	REVISED AS-BUILT		
1	J.P.K.	4/25/00			
				NO.	DATE
					DESCRIPTION

10360 S.W. Nimbus Ave.
Suite 514
Tigard, Oregon
(503) 968-6589
FAX (503) 968-7439

TRILAND DESIGN GROUP, INC.
PLANNING · CIVIL ENGINEERING · LAND SURVEYING

PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
1672 WILLAMETTE FALLS DRIVE
WEST LINN, OR 97068
PHONE (503) 557-8000
FAX (503) 656-1601

RENAISSANCE VILLAS
DETAILS
BLAND CIRCLE
WEST LINN, OREGON

Project: 98014
Designed: CWQ
Drawn: CWQ
Checked: SBT
Date: 8/10/99

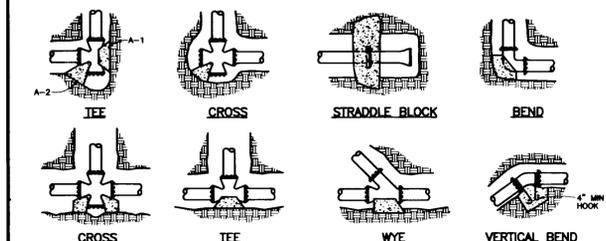
(HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET										(VERTICAL) VOLUME OF THRUST BLOCK IN CUBIC YARDS			
FITTING SIZE	TEE, WYE, DEAD END AND HYDRANT	STRADDLE BLOCK	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN	45° BEND	22-1/2° BEND	11-1/4° BEND	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND		
4	1.0	1.6	1.4	1.9	1.4	1.0	---	---	---	---	---		
6	2.1	3.7	3.0	4.3	3.0	1.6	1.0	---	---	---	---		
8	3.8	6.5	5.3	7.8	5.4	2.9	1.5	1.0	2.3	1.1	---		
10	5.9	10.2	8.4	11.8	8.4	4.6	2.4	1.2	3.7	1.8	---		
12	8.5	14.7	12.0	17.0	12.0	6.6	3.4	1.7	5.5	2.8	1.2		
14	11.5	---	16.3	23.0	16.3	8.9	4.6	2.3	7.6	3.9	1.7		
16	15.0	26.1	21.3	30.0	21.3	11.8	6.0	3.0	9.9	5.1	2.3		
18	19.0	---	27.0	38.0	27.0	14.8	7.6	3.8	---	---	---		
20	23.5	40.8	33.3	47.0	33.3	18.1	9.4	4.7	---	---	---		
24	34.0	58.8	48.0	66.0	48.0	26.2	13.6	6.8	---	---	---		

NOTES:
 1. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:

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

 2. ABOVE VOLUMES BASED ON TEST PRESSURE OF 150 PSI AND THE WEIGHT OF CONCRETE = 4050 POUNDS PER CUBIC YARD. TO COMPUTE FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION:

$$\text{VOLUME} = (\text{TEST PRESSURE} / 150) \times (\text{TABLE VALUE})$$



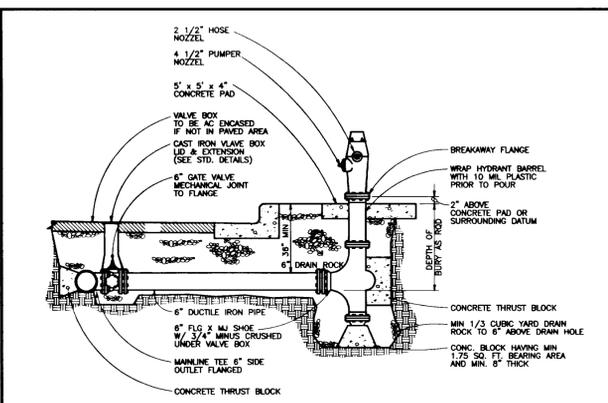
RODS FOR VERTICAL BENDS		
FITTING SIZE	ROD SIZE	EMBEDMENT
12" AND LESS	#6	30"
14"-18"	#8	36"

NOTES:
 1. CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 2. ALL CONCRETE TO BE CLASS 2400 MINIMUM.
 3. INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
 4. CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
 5. THE RODS SHALL BE DEFORMED GALVANIZED COLD ROLLED STEEL, 40000 PSI TENSILE STRENGTH.

THRUST BLOCKING

DATE: MAY 1992 DRAWING NO: 401

FILENAME: APW40039.DWG

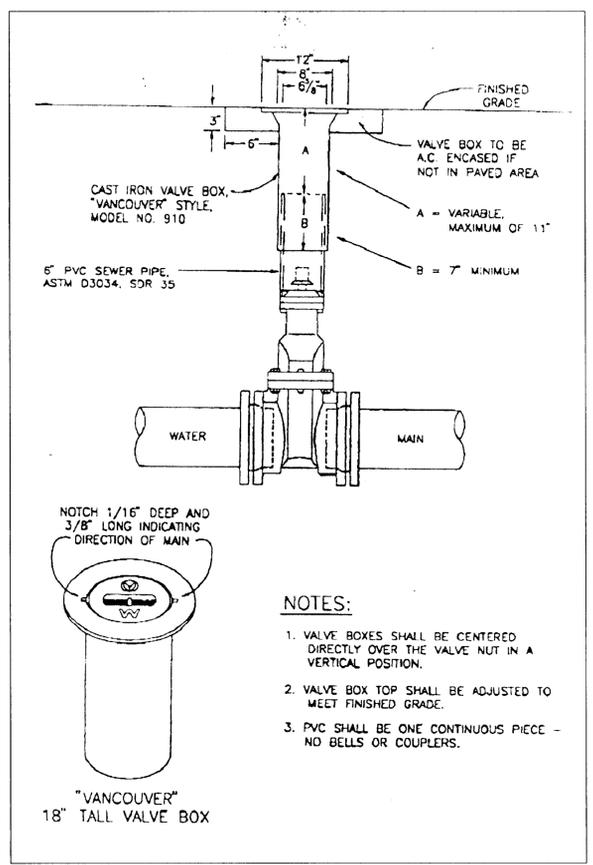


NOTES:
 1. HYDRANTS TO BE MUELLER CENTURIAN MFL A-429 ONLY WITH 1 1/2" OPERATING NUTS OR CLOW MEDALLION F-2545.
 2. HYDRANT COLOR TO BE MILLER EQUIP. CHANNEL D I E (SAFETY YELLOW).
 3. JOINTS TO BE RESTRAINED BY MEGA LUGS AND CONCRETE THRUST BLOCKS.
 4. ALL FITTINGS IN CONTACT W/CONCRETE SHALL BE WRAPPED IN PLASTIC. HYDRANT DRAIN HOLES TO REMAIN OPEN TO DRAIN ROCK AND OPERATIONAL.
 5. MIN 4 GAL. FT. OF 1 1/2" - 3/4" CLEAN DRAIN ROCK SHALL BE PLACED AROUND SHADE UP TO A MIN OF 6" ABOVE DRAIN OUTLETS.
 6. WHERE PALMETER STRIP EXISTS, HYDRANT SHALL BE PLACED SO FRONT PORT IS A MINIMUM OF 24" BEHIND FACE OF CURB.
 7. WHERE INTEGRAL S/W & CURB EXISTS HYD. SHALL BE PLACED AT BACK OF S/W OR AS DIRECTED BY ENGINEER.
 8. BURY OF HYDRANT SHALL BE MEASURED FROM FINISHED GRADE TO BOTTOM OF CONNECTING PIPE.
 9. THRUST BLOCK AT FIRE HYDRANT TEE SHALL HAVE 37 SQ. FT. BEARING AREA.
 10. HYDRANT VALVE SHALL BE RESILIENT WEDGE GATE VALVE ONLY.
 11. WHERE NO S/W EXISTS PLACE A 5' x 5' x 4" THICK AC OR CONCRETE APRON AROUND HYDRANT.

HYDRANT INSTALLATION

DATE: JULY 1999 DRAWING NO:

FILENAME: WESTLNN

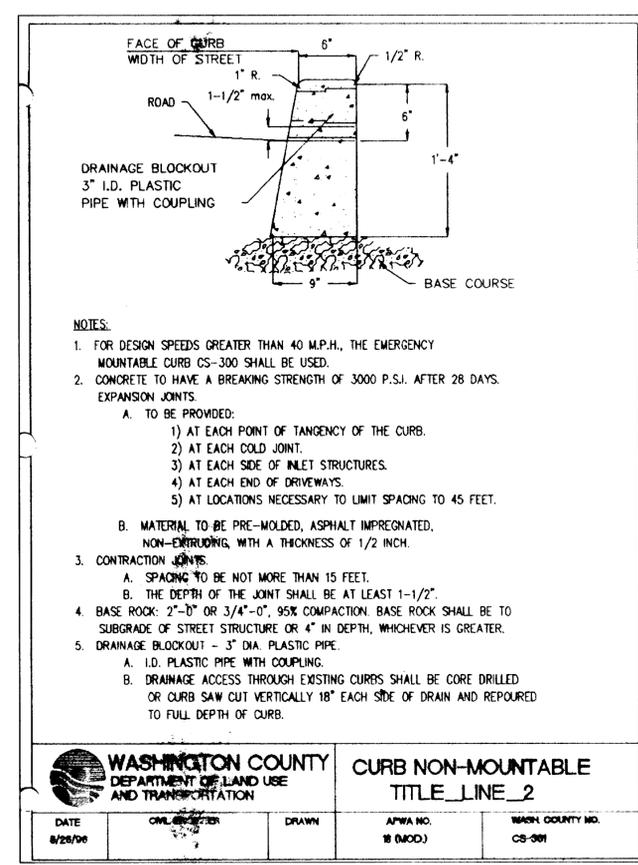


NOTES:
 1. VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
 2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.
 3. PVC SHALL BE ONE CONTINUOUS PIECE - NO BELLS OR COUPLERS.

"VANCOUVER" 18" TALL VALVE BOX

DATE: JULY 1999 DRAWING NO:

FILENAME: APW40039.DWG



NOTES:
 1. FOR DESIGN SPEEDS GREATER THAN 40 M.P.H., THE EMERGENCY MOUNTABLE CURB CS-300 SHALL BE USED.
 2. CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. AFTER 28 DAYS. EXPANSION 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 EACH END OF DRIVEWAYS.
 5) AT LOCATIONS NECESSARY TO LIMIT SPACING TO 45 FEET.
 B. MATERIAL TO BE PRE-MOLDED, ASPHALT IMPREGNATED, NON-EXTRUDING, WITH A THICKNESS OF 1/2 INCH.
 3. CONTRACTION JOINTS:
 A. SPACING TO BE NOT MORE THAN 15 FEET.
 B. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1-1/2".
 4. BASE ROCK: 2"-10" OR 3/4"-0", 95% COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4" IN DEPTH, WHICHEVER IS GREATER.
 5. DRAINAGE BLOCKOUT - 3" DIA. PLASTIC PIPE.
 A. I.D. PLASTIC PIPE WITH COUPLING.
 B. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED OR CURB SAW CUT VERTICALLY 18" EACH SIDE OF DRAIN AND REPOURED TO FULL DEPTH OF CURB.

WASHINGTON COUNTY DEPARTMENT OF LAND USE AND TRANSPORTATION

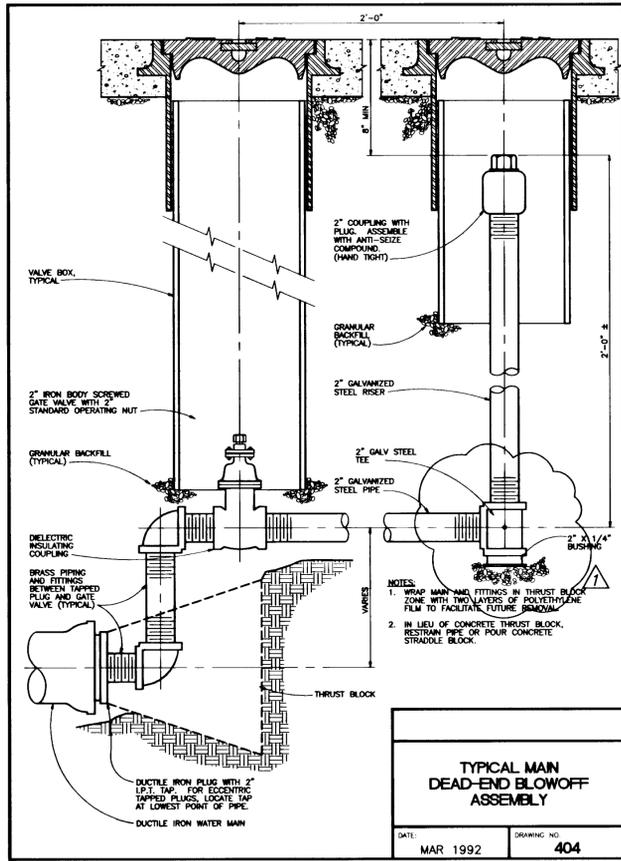
CURB NON-MOUNTABLE TITLE LINE 2

DATE: 8/28/98 CML: [Signature] DRAWN: [Signature] APWA NO: 18 (MOD.) WASH. COUNTY NO: CS-301

NO.	BY	DATE	DESCRIPTION
1	P.K.	4/25/00	
2	CWO	10/13/00	REVISED AS-BUILTS
3	CWO	2/20/01	REVISED AS-BUILTS
4	CWO	03/07/01	REVISED AS-BUILTS
5	CWO	03/13/01	AS-BUILTS MFLAR

10360 S.W. Nimbus Ave.
 Suite M-4
 Tigard, Oregon
 (503) 968-6589
 FAX (503) 968-7439

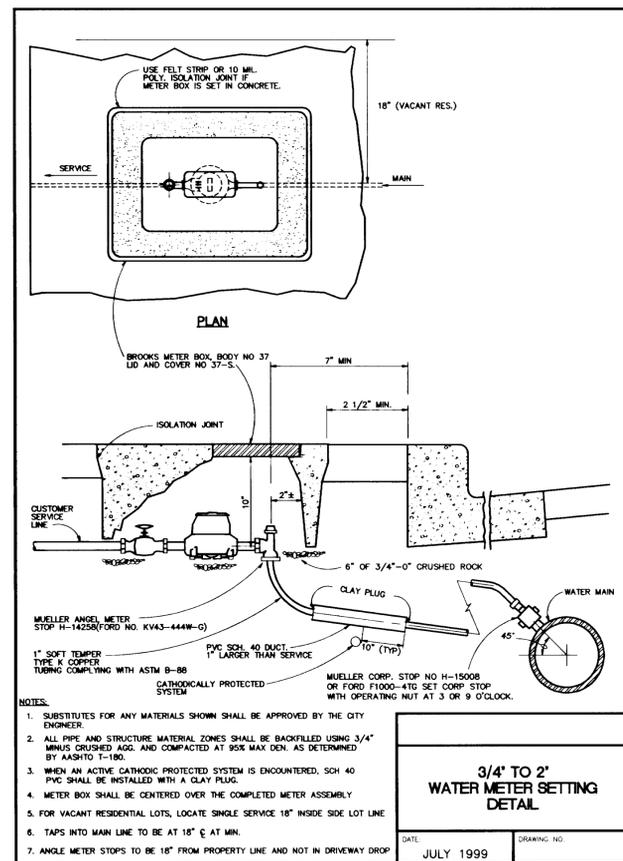
TRILAND DESIGN GROUP, INC.
 PLANNING - CIVIL ENGINEERING - LAND SURVEYING



TYPICAL MAIN DEAD-END BLOWOFF ASSEMBLY

DATE: MAR 1992 DRAWING NO: 404

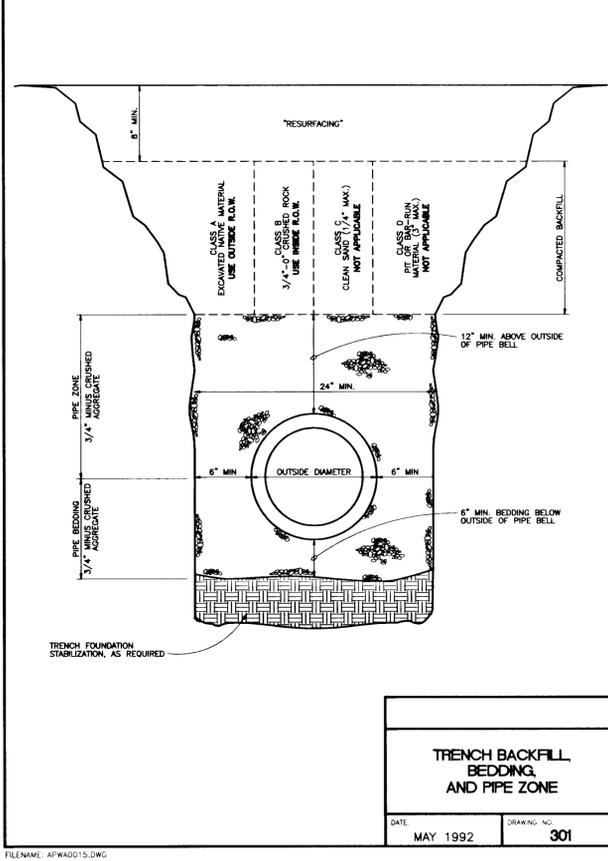
FILENAME: APW40039.DWG



3/4" TO 2" WATER METER SETTING DETAIL

DATE: JULY 1999 DRAWING NO:

FILENAME: WESTLNN



TRENCH BACKFILL, BEDDING, AND PIPE ZONE

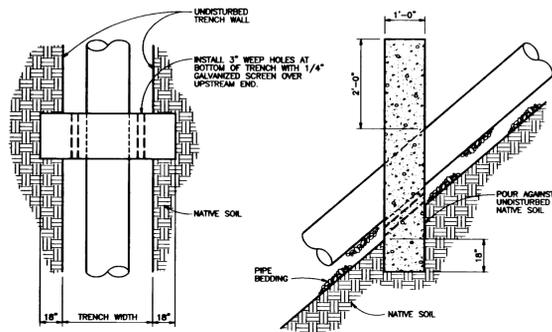
DATE: MAY 1992 DRAWING NO: 301

FILENAME: APW40039.DWG

PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
 1672 WILLAMETTE FALLS DRIVE
 WEST LINN, OR 97068
 PHONE (503) 657-8000
 FAX (503) 656-1601

RENAISSANCE VILLAS
 DETAILS
 BLAND CIRCLE
 WEST LINN, OREGON

Project: 98014
 Designed: CWQ
 Drawn: CWQ
 Checked: SBT
 Date: 8/10/99



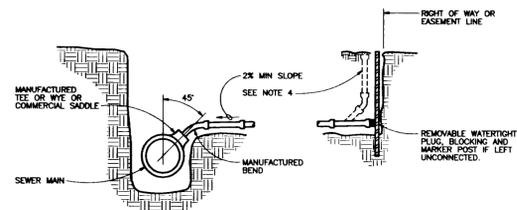
- NOTES:**
1. CONCRETE ANCHOR WALLS (CLASS 3000) SHALL BE CONSTRUCTED USING FORMS WHEN SEWERS, STORM DRAINS, AND OTHER PIPELINES ARE CONSTRUCTED WITH SLOPES 20 PERCENT OR GREATER. REMOVE FORMS PRIOR TO BACKFILLING TRENCH.
 2. SPACING OF ANCHOR WALLS SHALL BE:

SLOPE:	SPACING:
20-34%	35 FEET
35-50%	25 FEET
50+ %	15 FEET OR CONCRETE ENCASEMENT

PIPE ANCHOR DETAIL

DATE: MAY 1992 DRAWING NO: 303

FILENAME: APWAD017.DWG



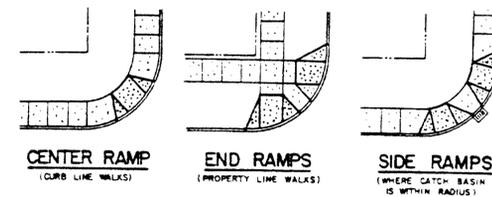
TRENCH SERVICE CONNECTION
NOTE: LATERALS FOR LOTS

- NOTES:**
1. PIPE AND FITTINGS SHALL BE COMPATIBLE. ONLY MANUFACTURED FITTINGS SHALL BE USED.
 2. MINIMUM DEPTH AT RIGHT OF WAY OR EASEMENT LINE SHALL BE 2 FEET.
 3. MARKER POSTS AND BLOCKING SHALL BE TREATED WOOD. POST SHALL BE 2" x 4" FIB. POST TO EXTEND 12" MINIMUM ABOVE FINISH GRADE AND EXPOSED AREA SHALL BE PAINTED WHITE.
 4. WHEN REQUIRED, A CLEANOUT SHALL BE INSTALLED.

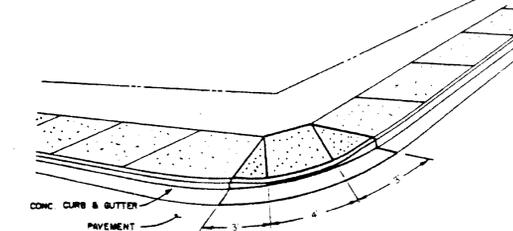
SHALLOW TRENCH SERVICE CONNECTION, BLOCKING, AND MARKERS

DATE: MAY 1992 DRAWING NO: 308

FILENAME: APWAD023.DWG



CENTER RAMP (CURB LINE WALKS) END RAMP (PROPERTY LINE WALKS) SIDE RAMP (WHERE CATCH BASIN IS WITHIN RADIUS)

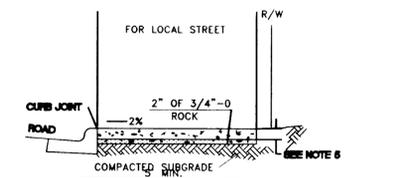


- NOTES:**
1. For sidewalk details, see Dwg. No.'s CS - 270 & CS - 270.1
 2. See Dwg. No. CG - 265 for curb and gutter detail.
 3. Ramp width shall be as shown hereon unless otherwise approved by the City Engineer.
 4. Concrete shall be 3000 PSI at 28 days, 6 sack mix, slump range 1 1/2" to 3".

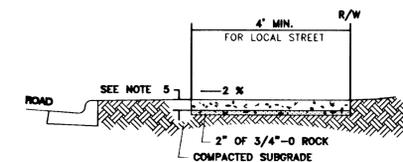
CITY OF WEST LINN SIDEWALK RAMP

DRAWN BY: DATE: 5-27-92
CHECKED BY: DATE: 5-27-92
APPROVED BY: DATE: 5-27-92 DWG. NO. CS - 271

FILENAME: APWAD024.DWG



SIDEWALK ADJACENT TO CURB



SIDEWALK AWAY FROM CURB

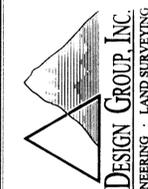
NOTES:

1. CONCRETE SHALL BE 3000 PSI AT 28 DAYS, 6 SACK MIX, SLUMP RANGE OF 1-1/2" TO 3".
2. PANEL LENGTHS SHALL BE EQUAL TO THE SIDEWALK WIDTH, BUT MAY BE ADJUSTED WITH THE CITY ENGINEER'S 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 AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROVELED JOINT WITH A MIN. 1/2 INCH RADIUS.
6. SIDEWALK SHALL HAVE A MIN. THICKNESS OF 6 INCHES IF MOUNTABLE CURB IS USED OR IF THE SIDEWALK IS INTENDED AS A PORTION OF A DRIVEWAY. OTHERWISE SIDEWALK SHALL HAVE A MIN. THICKNESS OF 4 INCHES.
7. DRAIN BLOCKOUTS IN CURBS SHALL BE EXTENDED TO BACK OF SIDEWALK WITH 3" DIA. PLASTIC PIPE AT 2% SLOPE. CONTRACTION JOINT TO BE PLACED OVER PIPE.

CONCRETE SIDEWALK

NOT TO SCALE

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PHONE (503) 968-6589
FAX (503) 968-7439



TRILAND DESIGN GROUP, INC.
PLANNING - CIVIL ENGINEERING - LAND SURVEYING

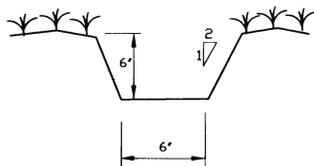
PREPARED FOR:
RENAISSANCE DEVELOPMENT CORPORATION
1672 WILLAMETTE FALLS DRIVE
WEST LINN, OREGON 97146
PHONE (503) 557-8000
FAX (503) 656-1601

RENAISSANCE VILLAS
DETAILS
BLAND CIRCLE
WEST LINN, OREGON

Project: 98014
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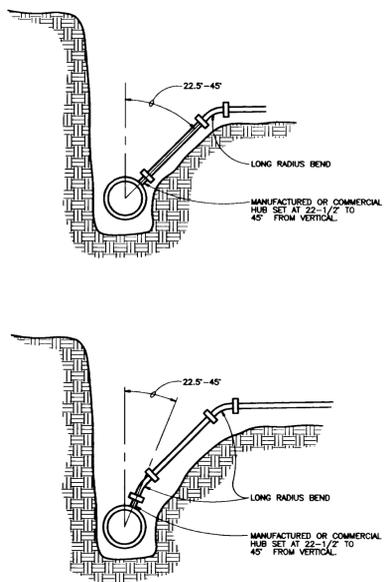
AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES



DRAINAGE DITCH

SEE SHEET 2

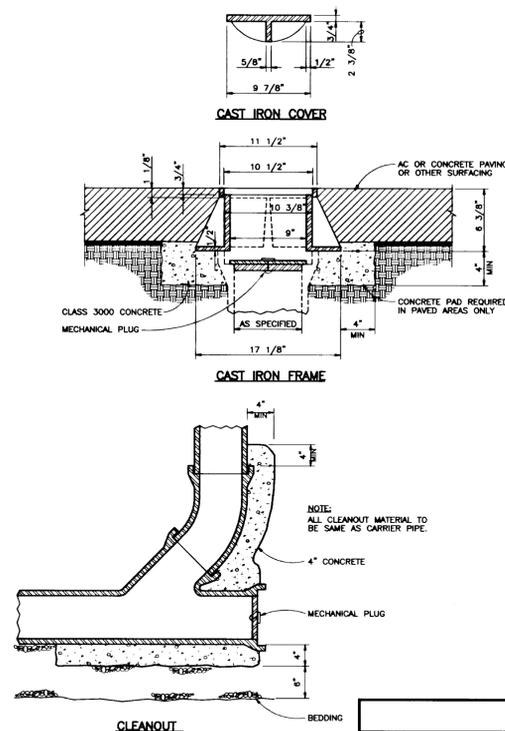


- NOTES:**
1. PIPE AND FITTINGS SHALL BE COMPATIBLE. ONLY MANUFACTURED FITTINGS SHALL BE USED.
 2. MINIMUM DEPTH AT RIGHT OF WAY OR EASEMENT LINE SHALL BE 4 FEET.
 3. PLUGGING, BLOCKING, AND MARKING OF UNCONNECTED SERVICES SHALL CONFORM TO SHALLOW TRENCH SERVICE CONNECTION DRAWING.
 4. VERTICAL TRENCH WALLS ARE REQUIRED. IF IT IS NOT POSSIBLE TO MAINTAIN VERTICAL TRENCH WALLS, USE ALTERNATE CONNECTION METHOD TO MAINTAIN 4" MAXIMUM DISTANCE BETWEEN FEEDER PIPE AND TRENCH WALLS. REPLACE ALL EXCAVATED OR DISTURBED MATERIAL WITH FULL DEPTH GRANULAR BACKFILL COMPACTED TO 95% RELATIVE DENSITY.
 5. WHERE DEEP CONNECTION IS AT AN ANGLE LESS THAN 45° FROM VERTICAL, DUCTILE IRON PIPE AND FITTINGS SHOULD BE USED.

TYPICAL DEEP TRENCH SERVICE CONNECTION

DATE: MAY 1992 DRAWING NO: 309

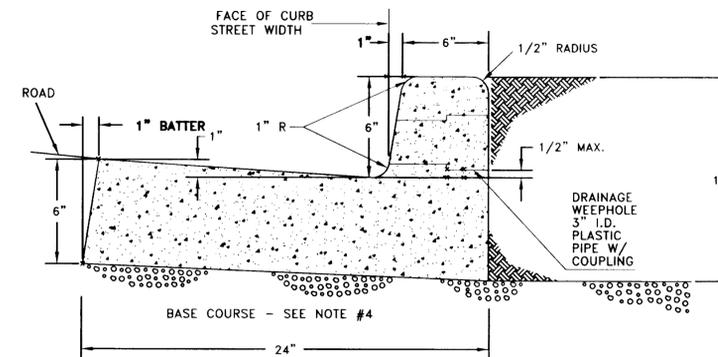
FILENAME: APWAD024.DWG



STANDARD CLEANOUT

DATE: MAY 1992 DRAWING NO: 310

FILENAME: APWAD052.DWG

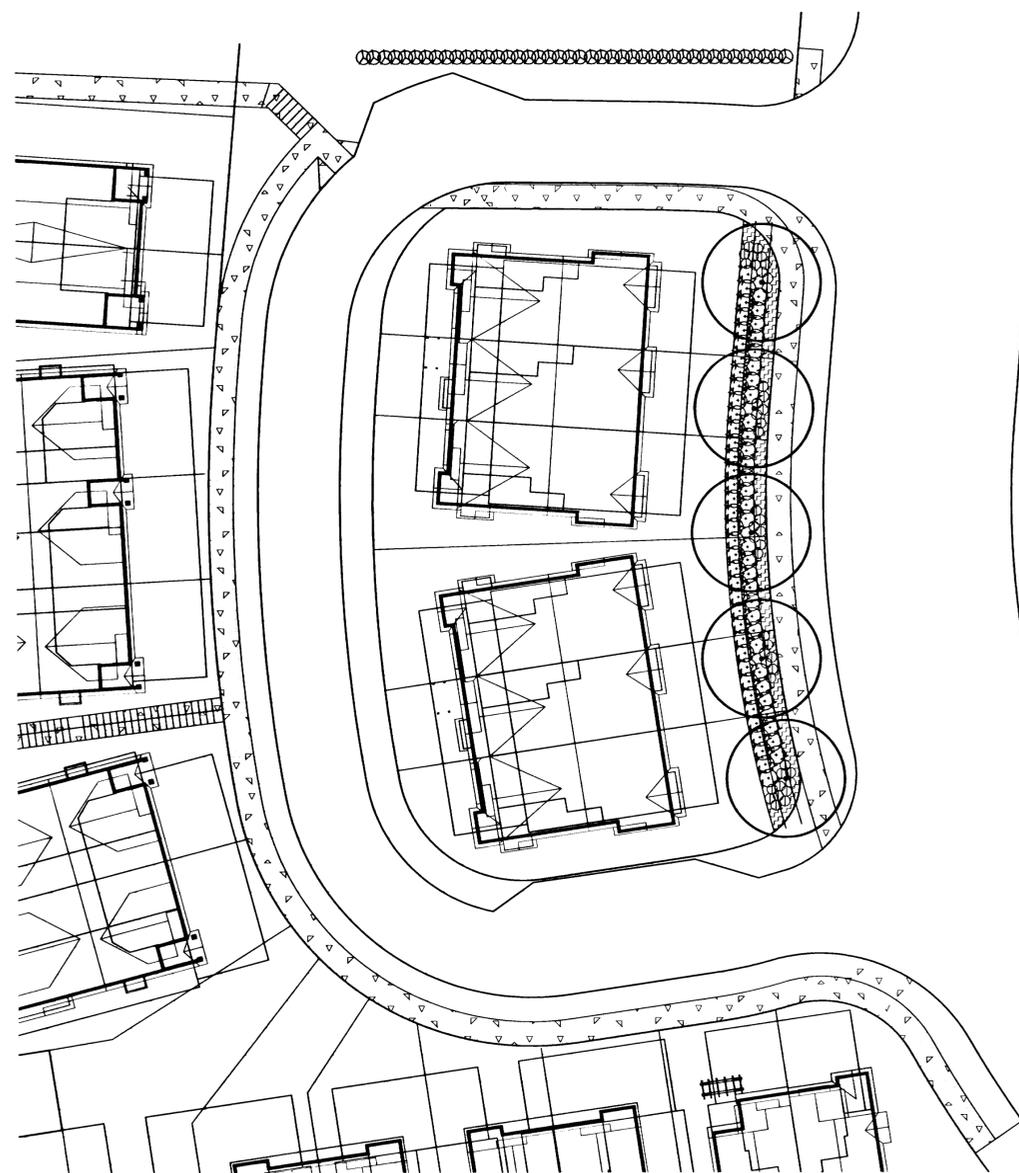


NOTES:

1. FOR USE ALONG MEDIANS, GUTTERS MAY BE REDUCED WITH PRIOR APPROVAL FROM THE CITY ENGINEER.
2. CONCRETE TO HAVE A BREAKING STRENGTH OF 3000 P.S.I. 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 ENDS 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 INCHES, WHICHEVER IS GREATER.
5. DRAINAGE BLOCK - 3" DIAMETER 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 AND GUTTER

NOT TO SCALE



GENERAL NOTES

THE CONTRACTOR SHALL INSTALL PLANT MATERIALS USING TOPSOIL WHICH CONSISTS OF ONE PART COMPOST AND TWO PARTS SANDY LOAM, AS INDICATED ON THE DETAILS.

ALL PLANTING AREAS SHALL RECEIVE A MINIMUM OF TWO INCHES OF MEDIUM, FINE AND NON-TOXIC BARK MULCH.

FERTILIZER SHALL BE STANDARD APPROVED BRAND, DELIVERED IN ORIGINAL CONTAINERS DRY AND FREE FLOWING BEARING GUARANTEED ANALYSIS OF THE MANUFACTURER. THE ORGANIC BASE SHALL BE 16-16-16.

COMPACT PREPARED SOIL MIX AND FLOAT LANDSCAPE AREAS TO PERIMETER ELEVATIONS REPRESENTED BY CURBS AND WALKS.

TOPSOIL SHALL BE FREE OF NOXIOUS WEEDS AND WEED SEEDS. CONTRACTOR SHALL GUARANTEE THAT WEEDS HAVE BEEN REMOVED PRIOR TO INSTALLATION.

ALL PLANTS SELECTED SHALL BE CONSISTENT WITH CURRENT AMERICAN NURSERYMEN'S STANDARDS. ANY PLANTS THAT ARE DISEASED, DEFORMED, ROOT BOUND, POORLY SHAPED OR DEFICIENT OF HEALTHY CHARACTERISTICS SHALL NOT BE ACCEPTED.

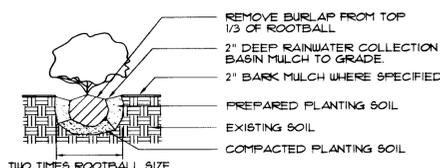
ALL PLANT MATERIAL SHALL BE WARRANTED FOR A PERIOD OF ONE YEAR AND SHALL BE IN A HEALTHY CONDITION AT THAT TIME. ALL PLANTS DEAD OR EXHIBITING UNHEALTHY CHARACTERISTICS SHALL BE REPLACED AT NO EXPENSE TO THE OWNER.

CONTRACTOR TO DESIGN AND TO INSTALL AN IRRIGATION SYSTEM PER MANUFACTURER'S SPECIFICATION, PROVIDING COMPLETE COVERAGE.

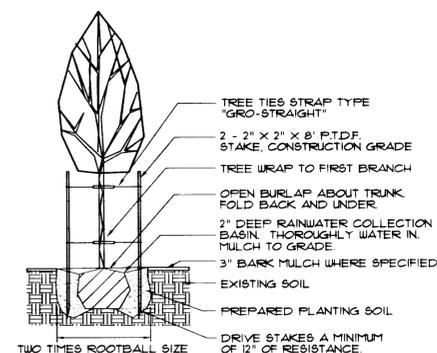
QUANTITY OF PLANTS ON THE PLAN TAKES PRECEDENCE OVER QUANTITY IN THE PLANT LEGEND.

PLANT LEGEND

SYMBOL	PLANT NAME	QUANTITY	SIZE	CONDITION
	Acer rubrum 'Red Sunset' Red Sunset Maple	5	2" GAL.	B&B
	Barberis thun. atro. 'Crimson Pygmy' Crimson Pygmy Barberry	43	2 GAL.	CONT.
	Prunus laetiflora Portuguese Laurel	71	5 GAL.	CONT.
	Thuja occidentalis 'Emerald' Emerald Green Arborvitae	42	4-5'	#30" O.C.
	Arctostaphylos uva-ursi Kinnick Kinnick	EST.	1 GAL.	24" O.C. TRI-SPACE



SHRUB PLANTING DETAIL
N.T.S.



DECIDUOUS TREE PLANTING
N.T.S.

AS-BUILT

THESE AS-BUILT PLANS ARE BASED ON PERIODIC FIELD OBSERVATIONS AND BY PERFORMING SURVEY MEASUREMENTS OF PUBLIC UTILITIES

NORTH



SCALE: 1" = 20'



Designed:	LMB
Drawn:	TLB
Checked:	LMB
8.18.99	
7.11.00	
Project No:	9926