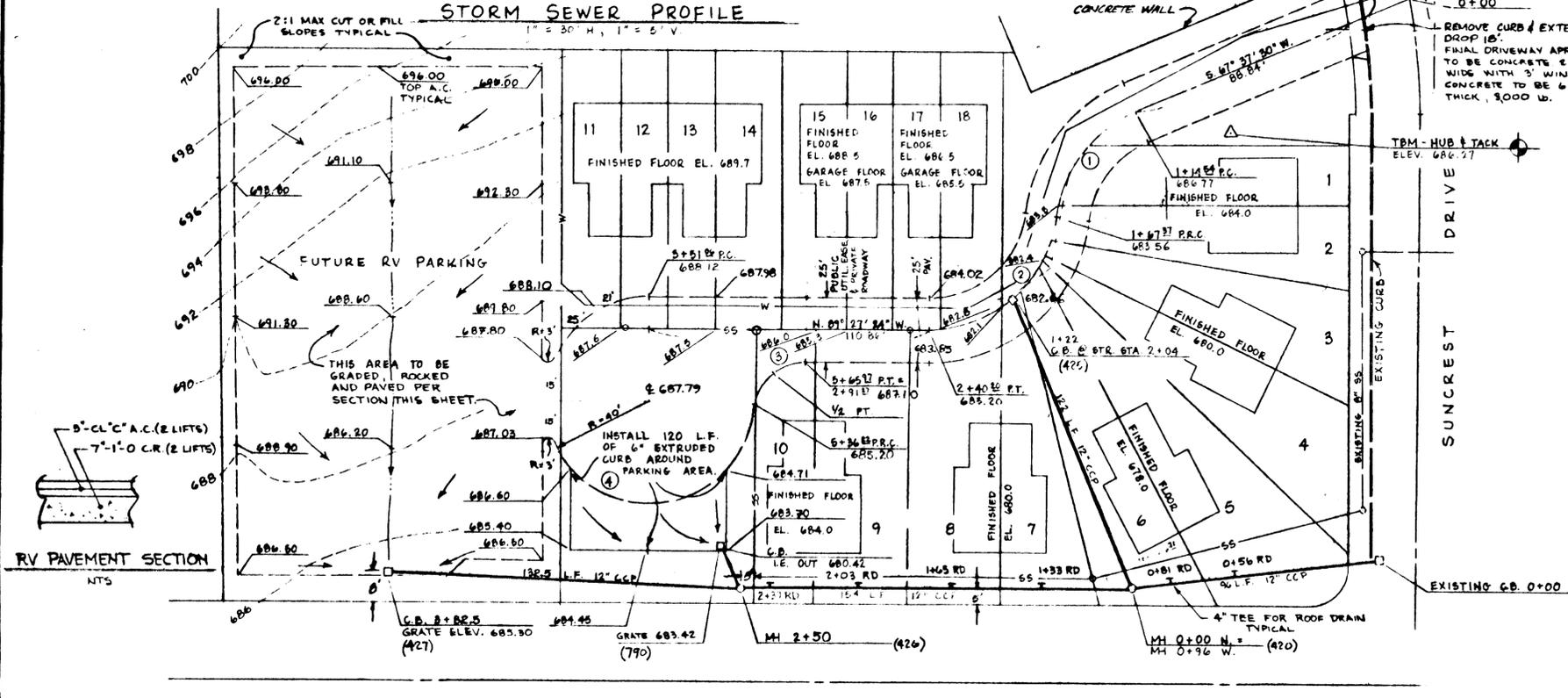


STATION	DELTA	LENGTH	CHORD
1	60° 32' 01"	52.83'	50.40'
2	83° 27' 07"	72.83'	66.56'
3	85° 19' 11"	29.75'	27.08'
4	265° 15' 11"	185.16'	58.88'

STORM SEWER PROFILE
1" = 30' H., 1" = 5' V.



PLAN
SCALE: 1" = 30'

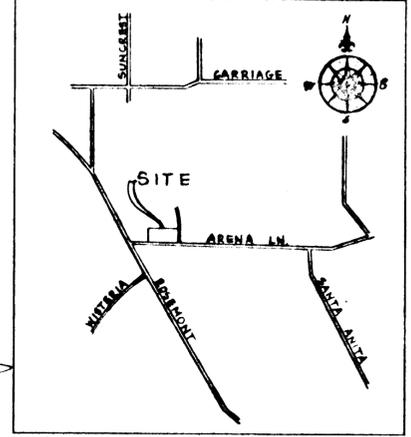
GENERAL NOTES:

- ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF WEST Linn PUBLIC WORKS DEPARTMENT, O.S.W.D. AND A.P.W.A. OREGON CHAPTER SPECIFICATIONS.
- CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL ARRANGE FOR THE RELOCATION OF ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
- CONTRACTOR TO 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, 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.

STREET AND STORM DRAINAGE NOTES:

- CONCRETE CULVERT PIPE SHALL BE ASTM C 15 CLASS 3 NONREINFORCED CONCRETE PIPE UNLESS SHOWN OTHERWISE ON PROFILE.
- PIPE BEDDING SHALL CONFORM WITH GRANULAR BEDDING AND BACKFILL REQUIREMENTS OF A.P.W.A. DIV. III SECTION 301.2.02 AND SHALL BE 3/4" CRUSHED ROCK.
- CORRUGATED METAL PIPE SHALL BE ASPHALT-COATED GALVANIZED STEEL PIPE AND COUPLING BANDS CONFORMING TO O.S.W.D. SECTION 605.
- TRENCHES WITHIN THE RIGHTS-OF-WAY SHALL BE "CLASS B" BACKFILL WITH SELECT GRANULAR MATERIAL CONFORMING TO APWA DIVISION THREE SECTION 301.2.04 B.
- COMPACTION SHALL BE PER APWA DIVISION THREE SECTION 301.3.07.
- CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE REQUIRED COMPACTION.
- TRENCH BACKFILL OUTSIDE OF PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL CONFORMING TO CLASS "A" PER APWA DIVISION THREE SECTION 301.2.04.
- MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH PIT RUN CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED AT THE LOWEST MOISTURE CONTENT AT WHICH A HANDFUL OF THE SOIL CAN BE MOLDED BY A FIRM CLOSING OF THE HAND. (95% COMPACTION AASHTO T180).
- 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.W.D. FOR MATERIAL USED. CONTRACTOR TO PROVIDE ENGINEER WITH CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT UNLESS OTHERWISE INDICATED.
- EXCESS EXCAVATION TO BE SPREAD AND COMPACTED EVENLY ON LOTS AS DIRECTED BY OWNER. VEGETATION AND TOP-SOIL TO BE STRIPPED OFF FILL AREAS PRIOR TO FILLING.
- SIDEWALKS SHOWN ON STREET SECTION ARE NOT PART OF THIS CONTRACT. THEY WILL BE CONSTRUCTED AS PART OF THE LOT IMPROVEMENTS.

VICINITY MAP N.T.S.



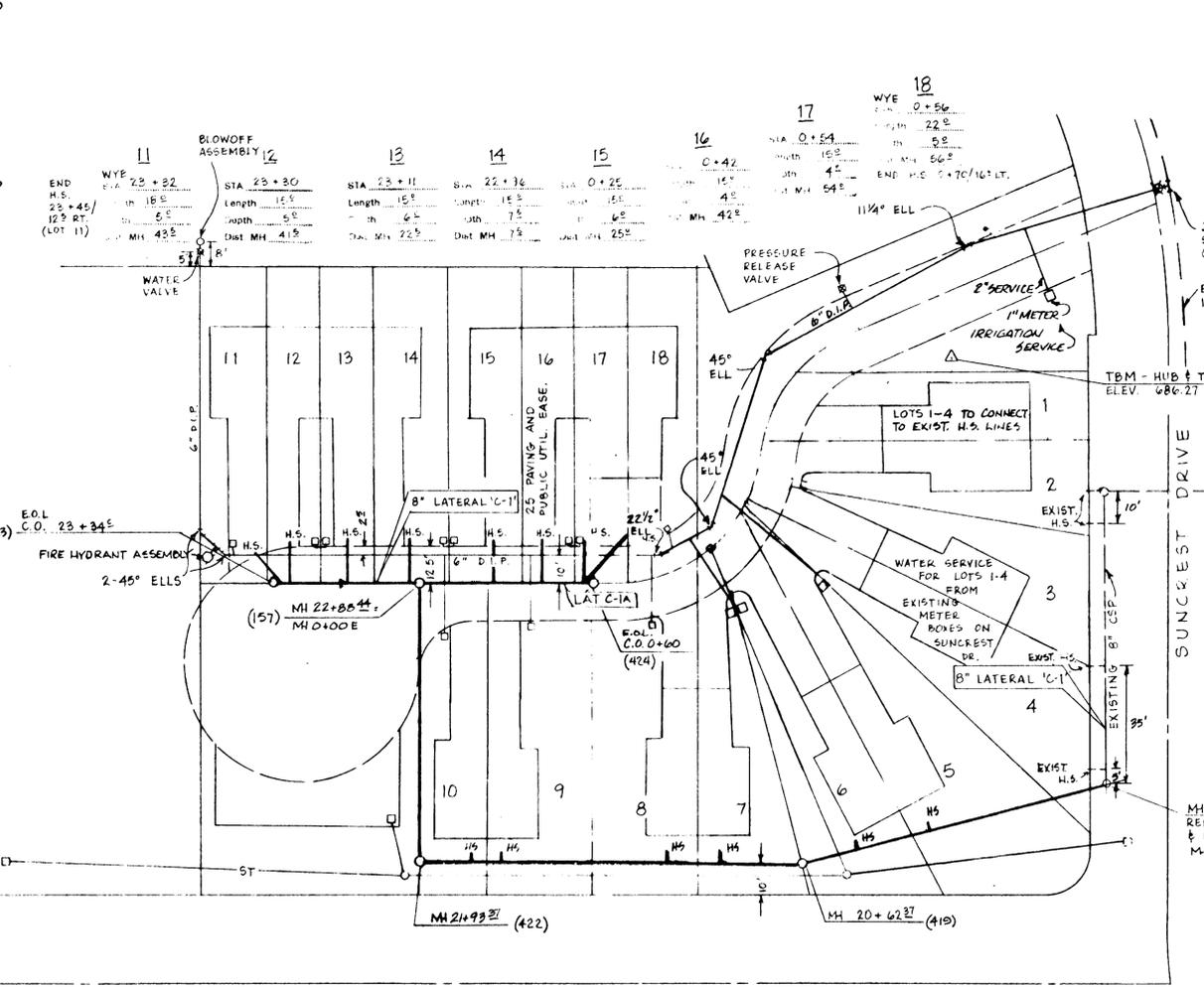
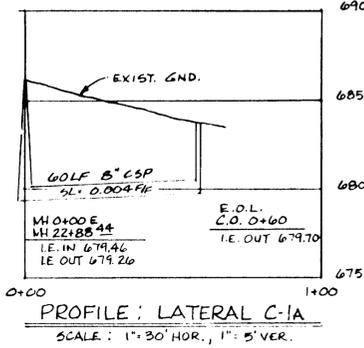
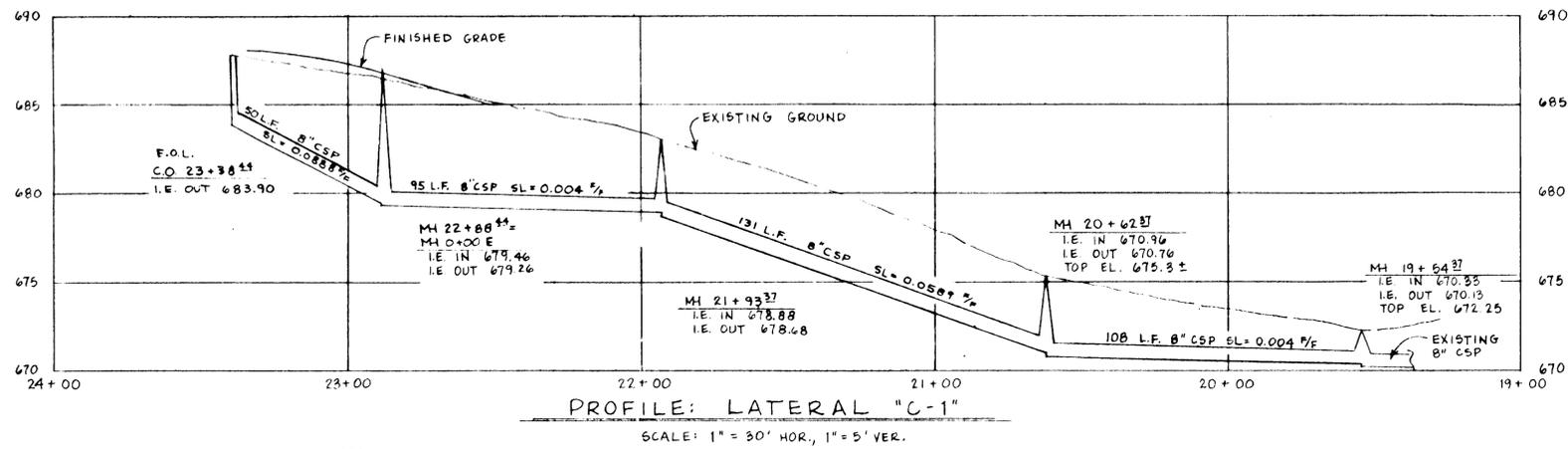
SUNBURST II, PHASE VI

DATE	NO.	REVISION
7/15/84	3	REVISED FINAL SCALE
6/15/84	2	REVISED ARE CITY REQUIREMENTS
5/25/84	1	REVISED ROAD GRADE AND STORM SEWER, ADDED BUILDING FLOOR ELEVATIONS

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6504 S.E. LAKE ROAD
MILWAUKIE OREGON 97222
503/222-4852
503/853-8093

K & F DEVELOPMENT, INC.
15790 SE. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

ROAD AND STORM SEWER IMPROVEMENTS
PLAN AND PROFILES
1/3



STATION	LENGTH	DEPTH	DIAMETER	MANHOLE
21+81	8'	6"	8"	MH 118
21+55	8'	6"	8"	MH 92
21+13	8'	6"	8"	MH 50
20+82	8'	6"	8"	MH 19
20+42	4'	6"	8"	MH 87
20+13	8'	6"	8"	MH 58

AS BUILT NOTES:

- ALL SANITARY SEWER HOUSE SERVICES ARE TIES UNLESS OTHERWISE NOTED.
- A 10" LONG 2" x 6" MARKER WAS PLACED AT THE END OF ALL SANITARY SEWER SERVICE LATERALS.

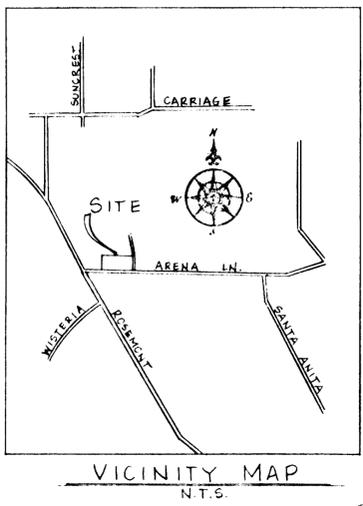
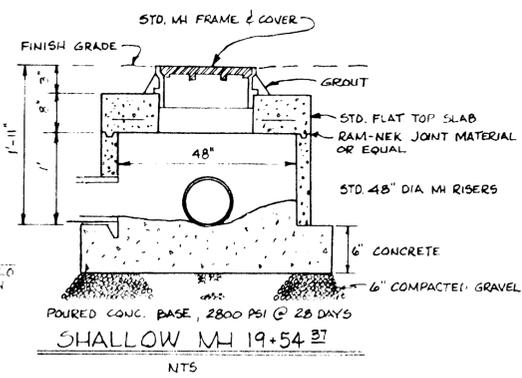
* END OF H.S. IS WEST OF S.W. FOUNDATION CORNER. PIPE IS 10' BELOW FIRST FLOOR ELEVATION.

WATER SYSTEM NOTES:

- ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF WEST Linn STANDARDS, THE OREGON STATE HEALTH DIVISION ADMINISTRATIVE RULES CHAPTER 333, THE A.W.W.A. AND THE A.P.W.A. STANDARDS.
- CONTRACTOR SHALL NOTIFY UTILITIES BEFORE STARTING CONSTRUCTION AND SHALL COORDINATE WATER LINE CONSTRUCTION WITH OTHER FACILITIES AND UTILITIES.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL CONSTRUCT THE WATER LINE TO AVOID CONFLICT WITH THE EXISTING UTILITIES.
- ALL PIPE TO BE MINIMUM COVER OF 30 INCHES BELOW FUTURE STREET GRADES.
- CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT PIPE INTERIORS, FITTINGS, AND VALVES AGAINST CONTAMINATION.
- FIRE HYDRANTS TO BE DRY-BARREL WATEROUS TYPE AND COMPLY WITH A.W.W.A. C502.
- HOUSE SERVICES TO BE COPPER TYPE "K" SEAMLESS SOFT ANNEALED. SERVICES TO HAVE FORD COMPRESSION FITTINGS. SINGLE SERVICES TO BE 3/4-INCH. DOUBLE SERVICES TO BE 1-INCH. COPPER TUBE BENDS TO BE SMOOTH RADIUS.
- METER BOXES TO BE NO. 1 METER BOX AS MANUFACTURED BY METER BOX EQUIPMENT COMPANY, TIGARD, OREGON.
- METER LOCATIONS TO BE 12-INCHES BELOW TOP OF CURB AND 6-INCHES BEHIND CURB. SERVICE TAPS TO BE AT LEAST 18-INCHES APART.
- GATE VALVES TO BE A.W.W.A. C500. BUTTERFLY VALVES TO MEET A.W.W.A. C504. VALVES TO HAVE 2-INCH OPERATING NUT WITH COUNTER CLOCKWISE OPENING AND NON-RISING STEM.
- DUCTILE IRON PIPE TO BE TYTON JOINT CEMENT MORTAR LINED CLASS 52 AND SHALL CONFORM TO ASTM C110, C150, AND C151.
- FITTINGS AND PIPE SECTIONS THAT WILL NOT BE DISINFECTED BY CHLORINE IN LINE FOR 24 HOURS SHALL HAVE THE INTERIORS SWABBED WITH A 5 PERCENT HYPOCHLORITE SOLUTION BEFORE THEY ARE INSTALLED.
- CONCRETE THRUST BLOCKS TO BE CONSTRUCTED AT TEES, BENDS, FIRE HYDRANTS, BLOWOFFS AND WHERE INDICATED ON PLANS. THE MINIMUM BEARING SURFACE AGAINST UNDISTURBED SOIL TO BE AS SHOWN ON THE DETAIL SHEET. CONCRETE SHALL BE ALLOWED TO CURE BEFORE PIPELINE PRESSURE TESTING.
- PIPELINE TO BE TESTED AT 150 P.S.I. AND HELD AT THE PRESSURE FOR 2 HOURS. TEST TO BE WITNESSED BY CITY WATER DEPARTMENT PERSONNEL.
- PIPELINE TO BE THOROUGHLY DISINFECTED AND FLUSHED IN ACCORDANCE WITH A.W.W.A. STANDARD C 601.

SANITARY SYSTEM NOTES:

- CONCRETE SANITARY SEWER PIPE SHALL BE ASTM C14. CLASS 2 NONREINFORCED CONCRETE PIPE WITH RUBBER GASKETS UNLESS SHOWN OTHERWISE ON PROFILE.
- ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE UTILITIES OR EXISTING SEWER LINES AS REQUIRED.
- ALL TRENCH EXCAVATION SHALL CONFORM TO APWA DIVISION THREE, SECTION 301.1.01 AND SHALL BE UNCLASSIFIED.
- ALL EXCESS MATERIAL FROM THE TRENCH EXCAVATION SHALL BE DISPOSED OF ON SITE.
- PIPE BEDDING SHALL BE AS PER APWA DIVISION THREE, SECTION 301.2.02 AND SHALL BE 3/4"-0 CRUSHED ROCK.
- TRENCH BACKFILL SHALL BE CLASS "A" PER APWA DIVISION THREE SECTION 301.2.04 ON ALL SEWER LINES OUTSIDE PUBLIC RIGHTS-OF-WAY OR OUTSIDE OF PAVED AREAS. TRENCH BACKFILL SHALL BE CLASS "B" PER APWA DIVISION THREE, SECTION 301.2.04B IN ALL PUBLIC RIGHTS-OF-WAY OR PAVED AREAS IN THE PROJECT.
- TRENCH BACKFILL COMPACTION SHALL BE AS PER APWA DIVISION THREE, SECTION 301.3.07. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE THE REQUIRED COMPACTION.
- SUBSEQUENT SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- ALL CONCRETE MANHOLES SHOWN ON THE PLANS ARE 48" MINIMUM DIAMETER AND CONFORM TO CITY STANDARD.
- BUILDING SERVICE CONNECTIONS TO SLOPE 2% MINIMUM UP TO FUTURE HOUSE LOCATION FROM SEWER LATERAL OR MAIN. SERVICE SHALL BE 6-INCH SEWER PIPE AND SHALL EXTEND TO MINIMUM OF 1 PIPE LENGTH BEYOND THE R/W OR EASEMENT LINE.
- WYES AND 1/8TH BENDS REQUIRED FOR HOUSE SERVICE CONNECTION AT MAIN LINE.
- STATIONING AND DISTANCE SHOWN ON PLAN AND PROFILE ARE HORIZONTAL AND NOT SLOPE DISTANCE.
- CONTRACTOR SHALL PREPARE A PRINT FOR THE ENGINEER SHOWING AS-CONSTRUCTION DATA: STATION OF WYE ALONG SEWER, LENGTH OF CONNECTION AND DEPTH OF SERVICE CONNECTION AT PROPERTY LINE OF END OF SERVICE AND ANY CHANGES MADE DURING CONSTRUCTION.
- FIELD OBSERVATION WILL BE AS DEEMED NECESSARY BY ENGINEER, IF INSPECTOR IS NOT PRESENT, CONTRACTOR SHALL CALL FOR INSPECTION PRIOR TO BACKFILLING TRENCH AND TO WITNESS PIPELINE TESTING.
- ALL SEWER LINES ARE TO BE AIR TESTED PER DIVISION THREE, SECTION 303.3.16 OF THE STANDARD SPECIFICATIONS.
- ALL MANHOLES THAT REQUIRE HYDROSTATIC TESTING SHALL BE TESTED IN ACCORDANCE WITH APWA DIVISION THREE, SECTION 303.3.15.
- PAVEMENT RESURFACING WHERE REQUIRED SHALL CONFORM TO APWA DIVISION THREE, SECTION 309.



SUNBURST II, PHASE VI



DATE	NO.	REVISION
5/17/84	1	AS BUILT
6/17/84	2	REVISED FOR CITY REQUEST
5/23/87	1	REVISED ROAD ALIGNMENT

COMPASS CORPORATION
 ENGINEERING SURVEYING PLANNING
 6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222 (503) 222-4852 (503) 653-9093

K & F DEVELOPMENT, INC.
 15790 S.E. PIAZZA AVE. CLACKAMAS, OREGON 97015 PH. 656-2518

SANITARY SEWER AND WATER IMPROVEMENTS - PLAN AND PROFILE