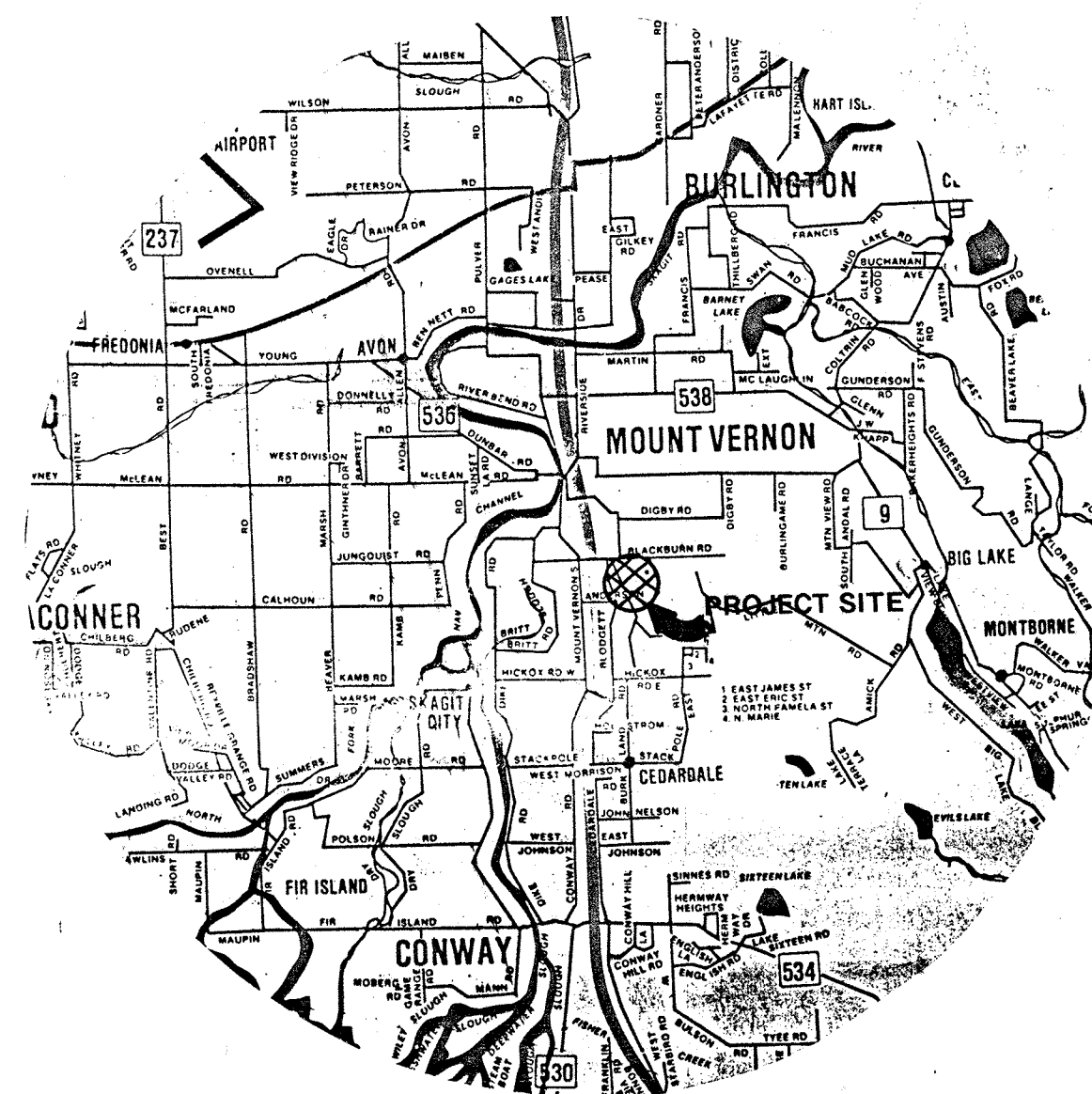


BLACKBURN RIDGE

CONSTRUCTION PLANS

FOR

ROADS, WATER, SANITARY SEWER, STORM WATER MANAGEMENT



VICINITY MAP

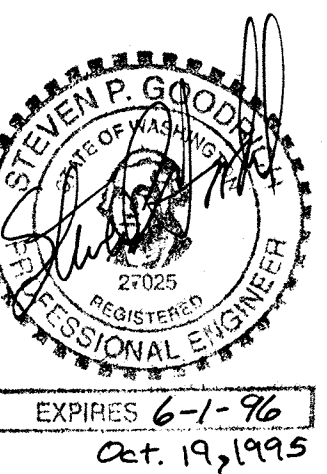
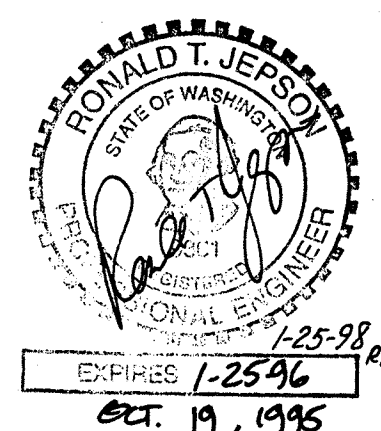
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APPROVED FOR CONSTRUCTION

 FRED BECKELMEIER, P.L.S.
 ASST. CITY ENGINEER
 DATE 3/4/97
 APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE



RONALD T. JEPSON & ASSOC.
 REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
 222 GRAND, BELLINGHAM, WASHINGTON 98225

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APPROVED BY	.
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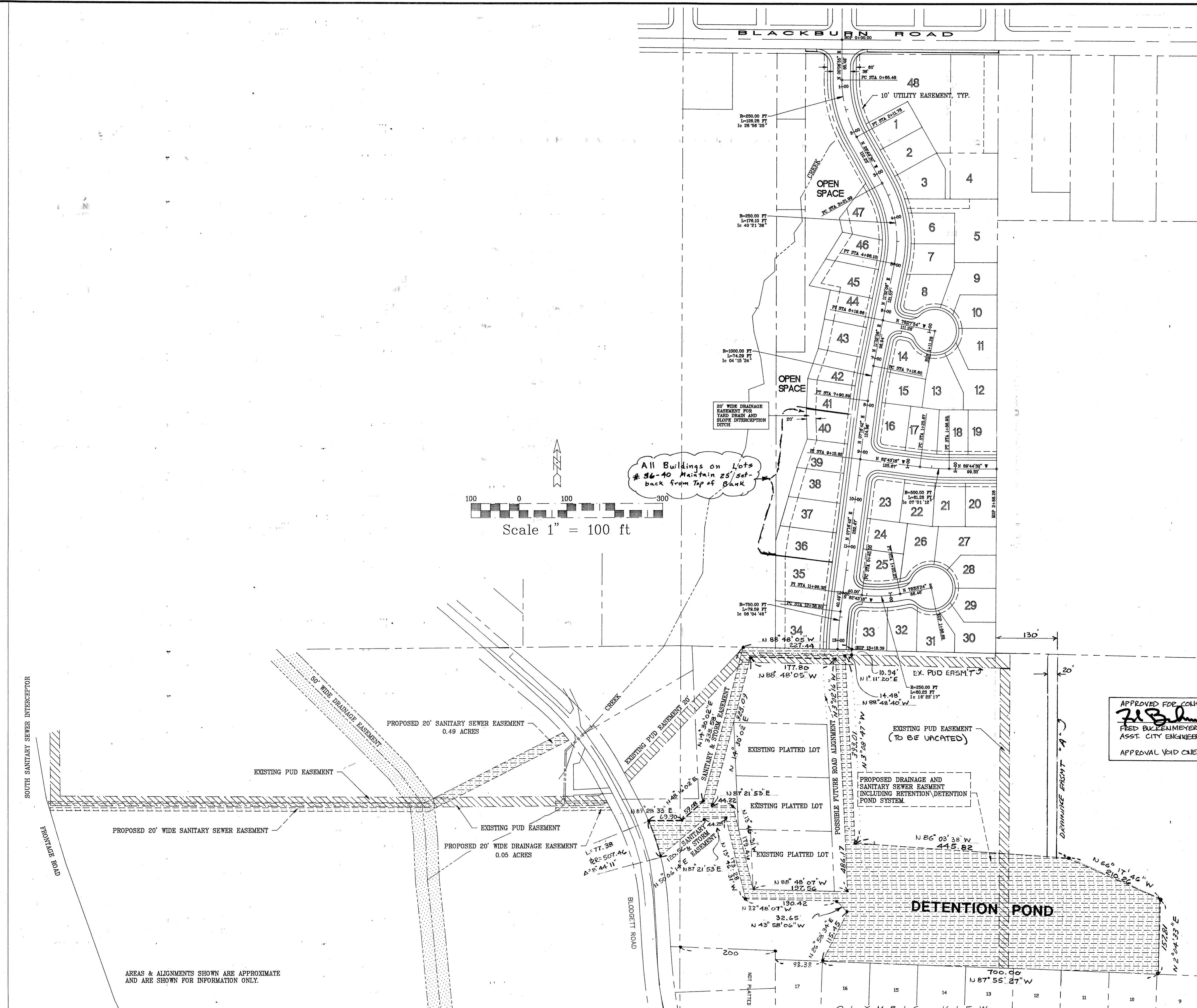
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 BLACKBURN PROPERTIES, INC.
 MT. VERNON, WASH.

BLACKBURN RIDGE
 CONSTRUCTION IMPROVEMENT PLANS
 GENERAL UTILITIES

RTJ-94111

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SUB 94-2
BLACKBURN RIDGE



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[Signature] 3-4-97
FEED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

27.9.1995
RONALD T. JEPSON
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 1-25-98 RTJ

STEVEN P. GOODRIE
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 6-1-96
Oct. 19, 1995

RONALD T. JEPSON & ASSOC.
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SCALE VARIES
DRAWN BY Steven P. Goodrich, PE
CHECKED BY
APPROVED BY
DATE 10/17/95

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CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE
IMPROVEMENT PLANS
GENERAL LOCATION & SITE PLAN

RTJ-94111

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CONSTRUCTION NOTES

GENERAL NOTES:

ALL CONSTRUCTION AND INSTALLATION WORK SHALL CONFORM TO THE DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF MOUNT VERNON, THE 1994 STANDARD SPECIFICATIONS AND STANDARD PLANS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION AS PREPARED BY WSDOT AND THE APWA. WORKMANSHIP, USE OF EQUIPMENT AND MATERIAL SHALL ALSO CONFORM TO THE RECOMMENDATIONS OF THE MANUFACTURERS, FEDERAL STATE AND CITY REGULATIONS. AREAS OFF-SITE SHALL BE RESTORED TO THEIR ORIGINAL CONDITIONS BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE OF WORK.

INTERRUPTIONS TO LOCAL TRAFFIC SHALL BE AVOIDED BUT IF NECESSARY ANY INTERRUPTION SHOULD BE SPECIFICALLY ARRANGED WITH THE APPROPRIATE AUTHORITIES AND REROUTING PERFORMED. THE EXISTING UTILITY LOCATIONS ARE SHOWN FOR INFORMATION ONLY AND ARE APPROXIMATE. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING WORK AND TAKE THOSE STEPS NECESSARY TO AVOID DAMAGE DURING CONSTRUCTION. CONFLICTS WITH THE EXISTING UTILITIES SHOULD BE IDENTIFIED AND COMMUNICATED IN WRITING TO CITY INSPECTOR AND PROJECT ENGINEER. UTILITIES LOCATED IN THE FIELD AND NOT SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER AND ANY CHANGES REQUIRED SHALL BE APPROVED BY THE CITY PRIOR TO COMMENCEMENT OF RELATED CONSTRUCTION.

NO PART OF THE CONSTRUCTION SHALL BE COVERED, CONCEALED OR PUT INTO USE UNTIL IT HAS BEEN TESTED, INSPECTED AND ACCEPTED BY THE CITY AND THE PROJECT ENGINEER UNLESS OTHER ARRANGEMENTS ARE MADE WITH THE CITY ENGINEER IN WRITING.

OTHER UTILITIES WORKING WITHIN THE LIMITS OF THE PROJECT SHOULD BE CONTACTED TO COORDINATE ALL WORK AS NECESSARY.

ALL WORK MUST BE STAKED BY SURVEY FOR "LINE AND GRADE" PRIOR TO STARTING CONSTRUCTION. THE SITE SHALL BE MAINTAINED IN A NEAT AND ORDERLY CONDITION WITH ALL GARBAGE REMOVED AS SOON AS PRACTICAL. ROUTINE AND FINAL CLEANUPS ARE TO BE AN INTEGRAL PART OF ALL BID ITEMS. AT THE JUNCTION WHERE THIS CONSTRUCTION CONNECTS WITH THE EXISTING STREETS, THE STREET SHALL BE LEFT IN A CONDITION TO SATISFY THE REQUIREMENTS IN THE APWA SPECIFICATIONS. NEW CONSTRUCTION SHOULD BE NEATLY CONNECTED WITHOUT DETRIMENT TO THE INTEGRITY OF THE EXISTING FACILITIES. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAVING WORK. ALL STREET WIDENING AREAS SHALL BE SAW CUT AT THE FOGLINE FOR A NEAT LINE EDGE. THE CONTRACTOR SHALL BE LICENSED WITH THE STATE OF WASHINGTON, INSURED AND/OR BONDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A ONE YEAR PERFORMANCE AND/OR MAINTENANCE BOND ON ALL WORK.

A PRE-CONSTRUCTION MEETING SHALL BE REQUIRED PRIOR TO COMMENCING CONSTRUCTION AND SHALL INCLUDE THE CONTRACTOR, CITY REPRESENTATIVES AND REPRESENTATIVES FOR THE OWNER. THE TYPICAL ROAD SECTION SHALL CONSIST OF 4" ASPHALT CONCRETE, 2" CRUSHED ROCK, AND 13" GRAVEL BASE ON GEOTEXTILE FABRIC, ALL DEPTHS LISTED ARE COMPACTED MATERIAL DEPTHS. GEOTEXTILE FABRIC SHALL CONSIST OF LONG CHAIN POLYMERIC FILAMENTS COMPOSED OF POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE. THE FILAMENTS SHALL BE ORIENTED INTO A STABLE NETWORK WHEREBY THEY RETAIN THEIR POSITIONS RELATIVE WITH EACH OTHER. THE GEOTEXTILE SHALL BE FREE OF ANY CHEMICAL TREATMENT OR COATING WHICH REDUCES PERMEABILITY AND SHALL BE INERT TO CHEMICALS COMMONLY FOUND IN SOIL. THE GEOTEXTILE SHALL CONFORM TO THE MINIMUM PHYSICAL PROPERTY REQUIREMENTS AS LISTED BELOW WITH ALL VALUES REPRESENTING CERTIFIABLE MINIMUM VALUES IN THE WEAKEST DIRECTION OF THE FABRIC. EACH ROLL OF FABRIC MUST MEET OR EXCEED THESE MINIMUM TEST VALUES WHEN SAMPLED ACCORDING TO ASTM-D-4354-84. THE FABRIC SHALL BE PROTECTED FROM ULTRAVIOLET RADIATION AND ABRASION DURING SHIPPING AND STORED IN A DRY CONDITION. THE FABRIC JOINTS SHALL BE LAPPED A MINIMUM OF 18". LAPPED FABRIC SHALL BE PLACED SO OVERLAPS FOLLOW THE DIRECTION OF THE FILL MATERIAL TO PREVENT WORKING FILL UNDER THE LAP. SEWN SEAMS SHALL HAVE A STRENGTH NOT LESS THAN 90 PERCENT OF THE TENSILE STRENGTH OF THE FABRIC. THE GEOTEXTILE FABRIC SHALL BE COVERED WITH FILL AS SOON AS POSSIBLE AND NOT LEFT EXPOSED FOR MORE THAN TWO WEEKS. DAMAGED FABRIC TORN OR PUNCTURED SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGE MEETING THE OVERLAP REQUIREMENTS. PRICE FOR GEOTEXTILE FABRIC SHALL BE INCLUDED AS PART OF THE ROAD CONSTRUCTION COST, IN PLACE.

MINIMUM GEOTEXTILE PROPERTIES		
TENSILE STRENGTH,	200 POUNDS	ASTM D-4632
ELONGATION %	50 %	ASTM D-4632
BURST STRENGTH,	110 POUNDS	ASTM D-3787
TEAR STRENGTH,	85 POUNDS	ASTM D-4533
ABRASION RESISTANCE	85 POUNDS	ASTM D-3884

GRAVEL BASE FOR THE ROAD SECTION SHALL CONFORM TO WSDOT STANDARD SPECS 9-03.14. THE 4" OF ASPHALT CONCRETE SHALL BE PLACED IN 2 EQUAL LIFTS. ALL ROAD FILLS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY FOLLOWING ASTM 1557. ALL ASPHALT SHALL BE TESTED IN ACCORDANCE WITH THE MOUNT VERNON SPECIFICATIONS LISTED IN THESE PLANS. TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY TO INSURE CONFORMANCE WITH THE SPECIFICATIONS AND CONSTRUCTION STANDARDS.

PIPE BEDDING AND BACKFILL SHALL CONFORM TO CITY STANDARD PLANS, AND WSDOT B-18C. BEDDING MATERIAL SHALL CONFORM TO WSDOT 9-03.15 & 9-03.16 WHERE APPLICABLE. BACKFILL SHALL CONFORM TO WSDOT 9-03.14 COMPACTED TO 95% FOLLOWING ASTM 1557 UNDER ALL ROADWAYS AND WSDOT 9-03.19 OUTSIDE OF ROADWAYS.

ALL PIPE LINES SHALL MEET THE STANDARDS FOR LEAKAGE TESTS. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND PERSONNEL TO OPERATE TESTS UNDER THE OBSERVATION OF THE PROJECT ENGINEER AND UTILITIES DEPARTMENT INSPECTOR, 48 HOUR NOTICE SHALL BE GIVEN PRIOR THE ANY AND ALL TESTS.

EXCAVATION OF THE DETENTION POND SHALL BE OBSERVED BY THE ENGINEER FOR VARIATIONS IN SOIL CONDITIONS AND MOISTURE. THE POND SHALL BE OVER EXCAVATED WITH 18" OF NATIVE SOIL COMPACTED TO 90% IN PLACE BEFORE A MINIMUM OF 12" OF TOP SOIL TO BRING THE SURFACE UP TO FINISH GRADE, AS SHOWN IN THESE PLANS. THE TOP SOIL SHALL BE PLACED, SMOOTHED, SEEDED AND MULCHED AS DESCRIBED IN THESE PLANS.

ALL STORM AND SANITARY SEWER CONSTRUCTION SHALL FOLLOW THE WSDOT STANDARD SPECIFICATIONS.

SANITARY SEWER NOTES:

ALL PVC SEWER PIPE AND FITTINGS SHALL CONFORM TO AND MEET THE REQUIREMENTS OF THE LATEST ASTM SPECIFICATION D3034. PIPE AND FITTINGS SHALL MEET STANDARD DIMENSION RATIO 35. SANITARY SEWER PIPE SHALL BE CLASS 150 AND BEAR THE MARK OF THE NATIONAL SANITATION FOUNDATION. ALL PIPE SHALL BE SUITABLE FOR USE AS A GRAVITY SEWER CONDUIT. PROVISIONS SHALL BE MADE FOR THE CONTRACTION AND EXPANSION AT EACH JOINT WITH A RUBBER RING, SECURELY PLACED TO PREVENT DISPLACEMENT.

MAINLINE SEWERS SHALL BE EIGHT INCH DIAMETER, CLASS 150, PVC SANITARY SEWER PIPE. SIDE SEWERS SHALL BE SIX INCH DIAMETER, CLASS 150, PVC PIPE. ALL SIDE SEWERS SHALL HAVE A MINIMUM SLOPE OF TWO PERCENT WITH THE TEST TEE/WYES PLUGGED AND BLOCKED ON THE ENDS FOR TESTING AND LOCATING FOR FUTURE USE. SEWER TEE/WYE SHALL BE FACTORY MADE WITH MATCHED ENDS FOR RUBBER GASKET FITTINGS, NO "CUT IN" TEES SHALL BE PERMITTED.

FITTINGS AND ACCESSORIES SHALL BE MANUFACTURED AND FURNISHED BY THE PIPE SUPPLIER OR BE AN APPROVED EQUAL WITH BELL AND/OR SPIGOT CONFIGURATIONS IDENTICAL TO THAT OF THE PIPE. MANHOLE COUPLINGS CORRESPONDING TO THE SIZE OF THE SEWER PIPE SHALL BE USED ON ALL MANHOLES.

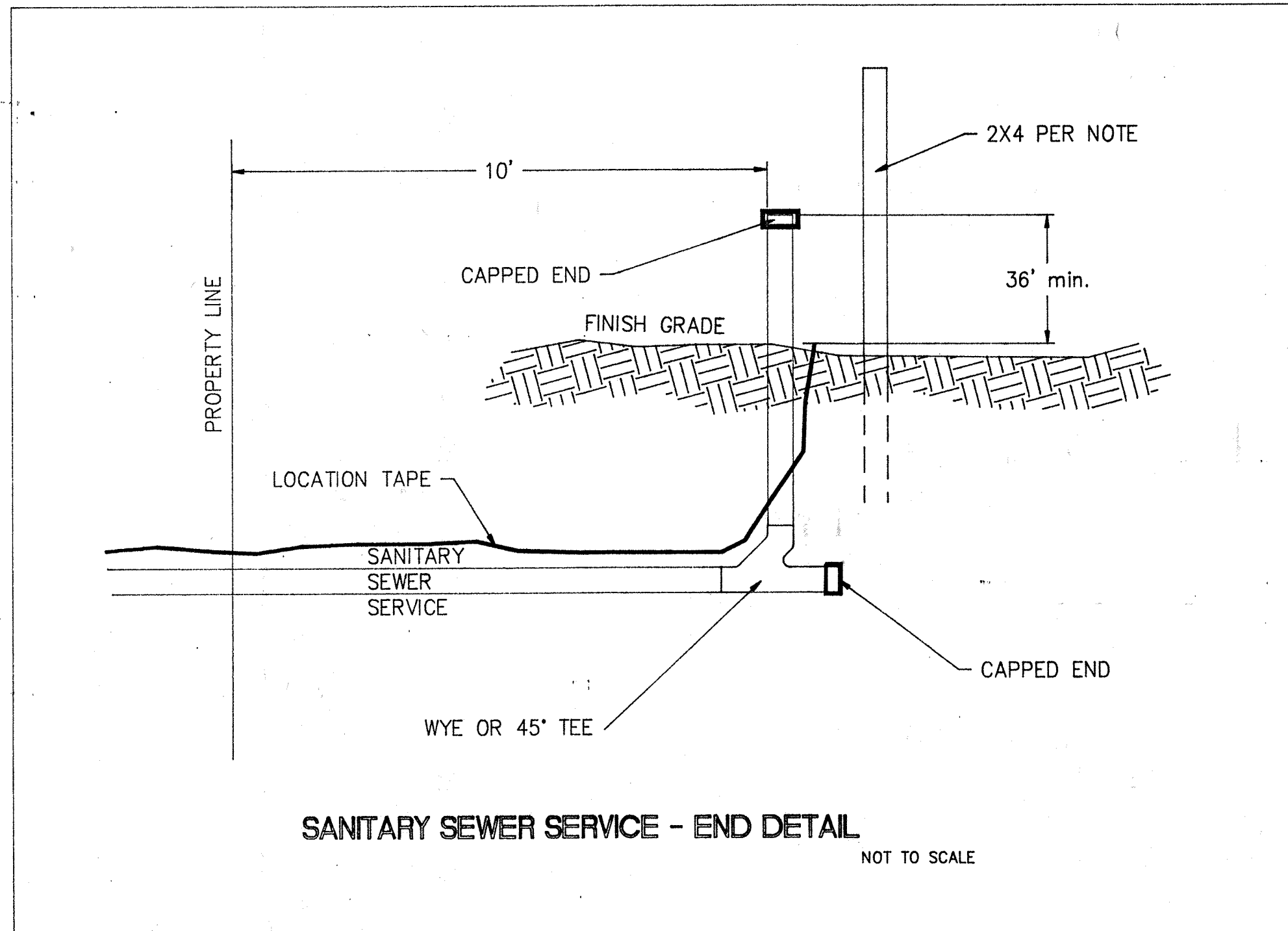
MANHOLES SHALL CONFORM TO THE CITY OF MOUNT VERNON STANDARDS AND WSDOT TYPE 1 AS SHOWN IN THESE PLANS.

THE END OF THE SANITARY SERVICE SHALL BE MARKED "SANITARY SEWER" ON TWO INCH BY FOUR INCH CEDAR BOARD OR POST, PAINTED WHITE AND EXTENDING A MINIMUM OF EIGHTEEN INCHES ABOVE THE GROUND SURFACE.

THE SANITARY SEWERS SHALL BE TESTED BY A LOW PRESSURE AIR TEST, PERFORMED BY THE CONTRACTOR AND OBSERVED BY THE CITY. THE CITY SHALL INSPECT THE SANITARY SEWER WITH A VIDEO CAMERA TO VERIFY ALIGNMENT, DEFLECTION OF PIPE, CLEANLINESS AND GENERAL QUALITY OF WORKMANSHIP. DEFECTS FOUND SHALL BE CORRECTED PRIOR TO ACCEPTANCE OF WORK BY THE CITY. THE LOW PRESSURE AIR TEST SHALL BE 4 PSI FOR 4 MINUTES WITH NO LOSS IN PRESSURE, SEE CITY FOR DETAILS AND SPECIFICATIONS.

ALL PVC PIPE CONNECTIONS TO MANHOLES AND OTHER STRUCTURES SHALL EMPLOY A SAND COLLAR.

FOR SERVICE RUNS METALLIC LOCATION TAPE SHALL BE PLACED ON THE TOP OF THE PIPE FOR THE FULL LENGTH OF THE RUN AND BE EXTENDED TO THE FINAL GROUND SURFACE AT THE END. SANITARY SEWER SERVICE ENDS SHALL BE TERMINATED IN A CAPPED WYE WITH THE VERTICAL PIPE EXTENDED TO 36" ABOVE FINAL GRADE, MARKED WITH A 2X4. THE CAPPED WYE AND VERTICAL RISER SHALL BE PLACED TEN FEET INSIDE THE PROPERTY LINE.



STORM DRAIN NOTES:

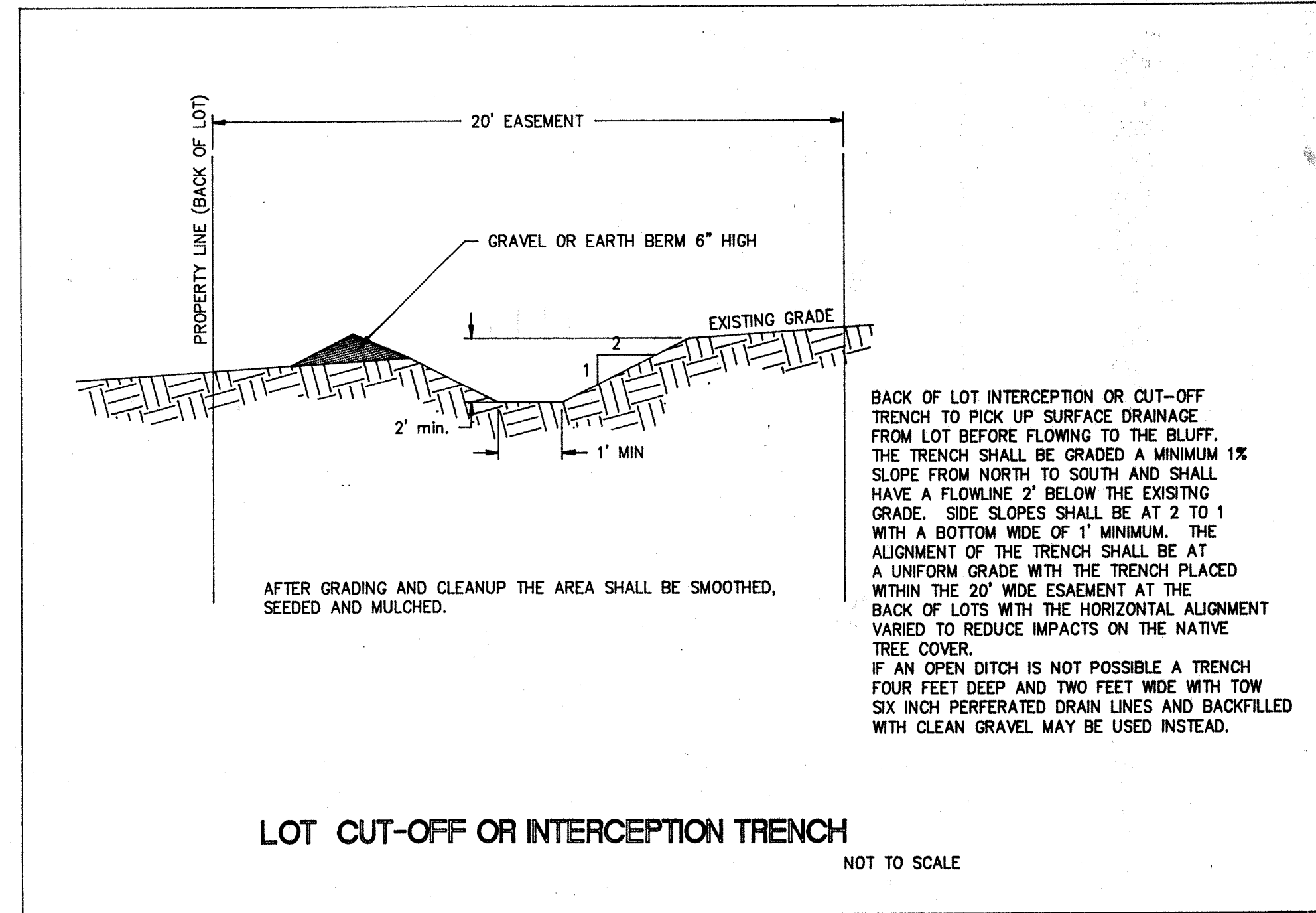
STORM SEWER PIPES AND FITTINGS SHALL CONFORM TO THE WSDOT STANDARD SPECIFICATIONS SECTION 9-05. STORM PIPES 8" TO 12" IN DIAMETER MAY BE PVC SEWER PIPE MEETING WSDOT 9-05.12; FOR 12" TO 24" DIAMETER PIPE SHOULD BE DOUBLE WALLED SMOOTH INTERIOR MEETING WSDOT 9-05.2(8); FOR 30" TO 48" DIAMETER STORM PIPE REINFORCED CONCRETE PIPE MEETING WSDOT 9-05.7

EACH LOTS SHALL HAVE DRAINAGE CONNECTS AS SHOWN ON THE PLANS. LOTS ON THE WEST SIDE OF THE PLAT SHALL HAVE A SLOPE INTERCEPTION SWALE CONSTRUCTED AS SHOWN ON THE PLANS NECESSARY TO PROVIDE POSITIVE DRAINAGE FOR LOTS.

STORM WATER INLETS, CATCH BASIN AND MANHOLES CONFORMING TO WSDOT STANDARD SPECIFICATIONS 9-05 AND THE WSDOT STANDARD PLANS:

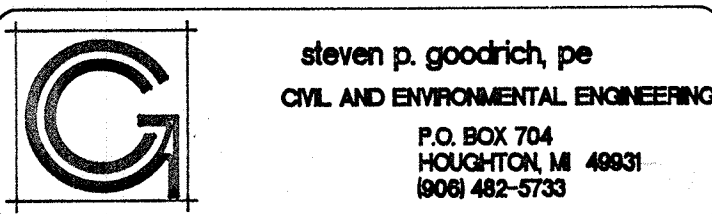
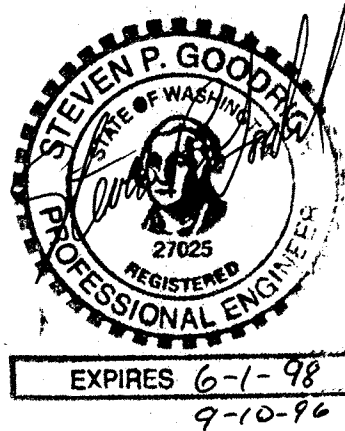
INLETS	B-26	PIPES 8" TO 12"
CATCHBASINS	B-1A	PIPES 24" TYPE 1L IF LESS THAN 5' DEEP
MANHOLES\CATCHBASINS	B-1E	PIPES 24" TYPE 2 48" DIAMETER
MANHOLES\CATCHBASINS	B-1E	PIPES 30" TYPE 2 54" DIAMETER
MANHOLES\CATCHBASINS	B-1E	PIPES 36" & 48" TYPE 2 72" DIAMETER

CONCRETE STRUCTURES SHALL BE CLASS 4000 OF CONCRETE AND MATERIAL CONFORM TO WSDOT SECTION 6-02.2.



STREET SIGN STANDARDS:

1. ALL SIGNS MUST CONFORM TO M.U.T.C.D SPECIFICATIONS
2. ALL SIGNS SHALL BE DIAMOND GRADE (HIGH DENSITY MAY BE ALLOWED AT THE DISCRETION OF THE ENGINEER.
3. ALL STOP SIGNS MUST BE 30" WIDE AND 30" HIGH.
4. STREET NAME SIGNS MUST HAVE 6" CAPITAL LETTERS.
5. STREET NAME SIGNS MUST HAVE TOP CAP BRACKETS ON THE POST AND THE SIGN CENTERED IN THE BRACKET.
6. STREET NAME SIGNS MUST BE EXTRUDED BLADES.
7. POSTS MUST BE 2" INSIDE DIAMETER SCHEDULE 40 GALVANIZED PIPE.
8. POSTS MUST BE CEMENTED IN CONCRETE INTO A 30" DEEP X 12" DIAMETER HOLE.



SCALE	VARIES
DRAWN BY	Steven P. Goodrich, PE
CHECKED BY	
APPROVED BY	
DATE	10/17/95

REVISION	
9-5-96	S.P.G.
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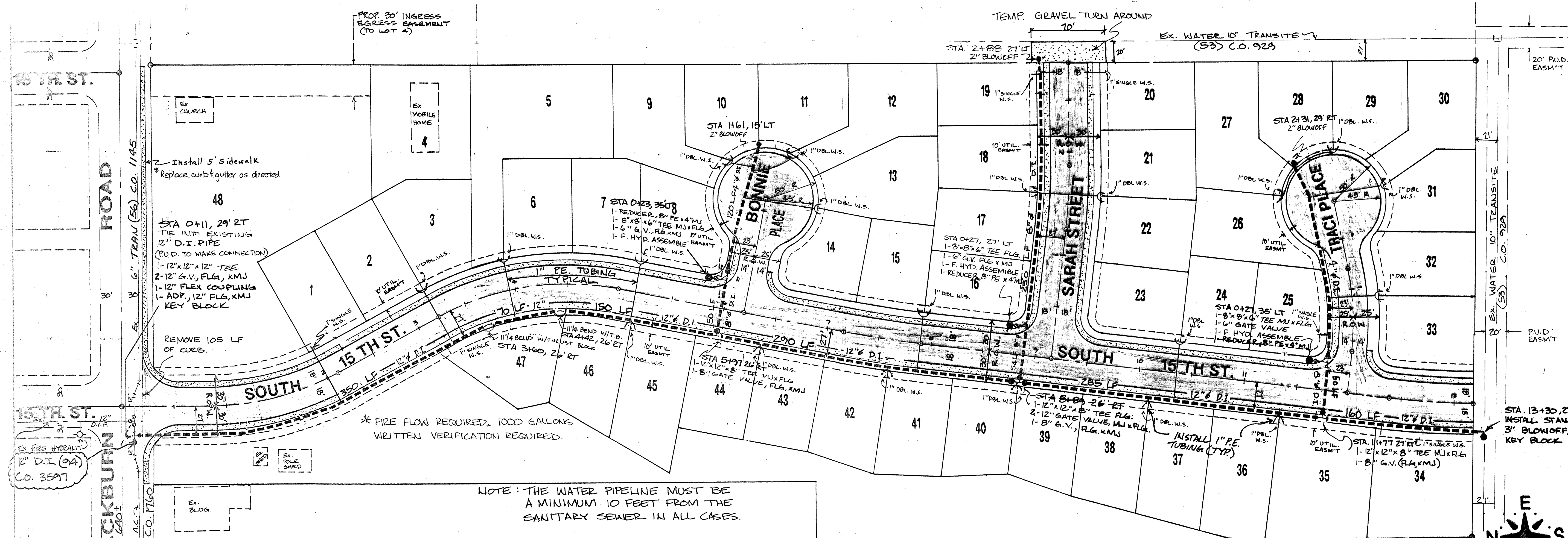
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BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE
IMPROVEMENT PLANS
GENERAL CONSTRUCTION NOTES

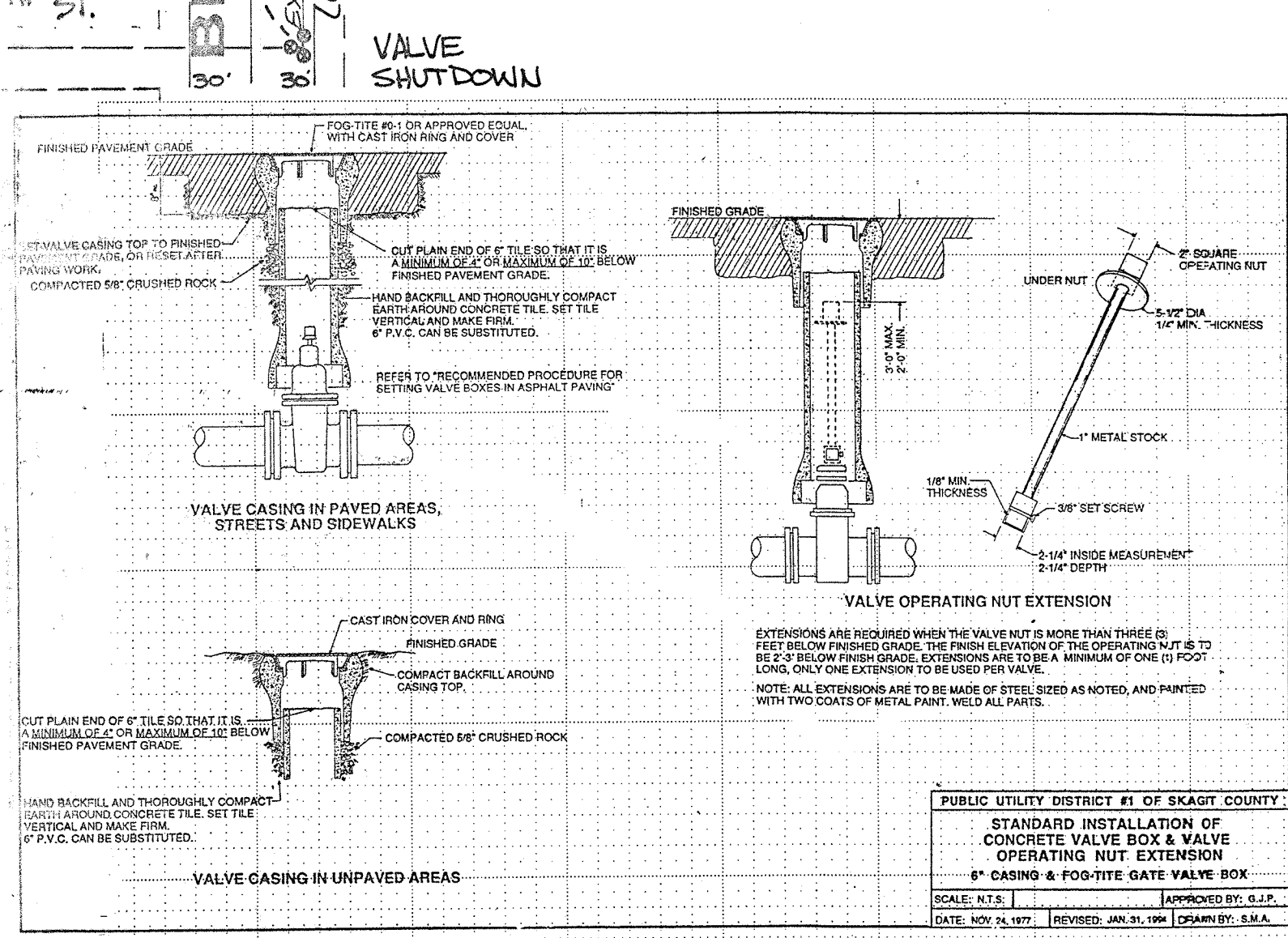
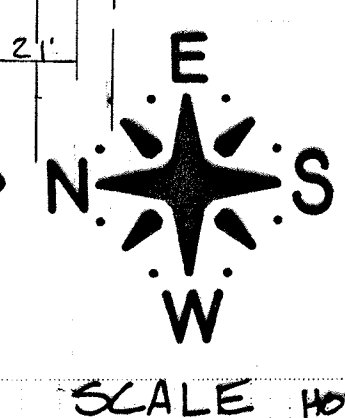
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ASST. CITY ENGINEER
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WATER SYSTEM SUB 34-2 4/120
BLACKBURN RIDGE



- GENERAL NOTES
- STANDARD SPECIFICATIONS TO BE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION 1994 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, AND AFWA CURRENT STANDARDS AND THE SAGIT P.U.D. REQUIREMENTS AS OUTLINED IN RESOLUTION NO. 1626-94.
 - CONTRACTOR SHALL NOTIFY AND COORDINATE WITH SAGIT PUD PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOT OPERATE ANY VALVES WITHOUT APPROVAL AND COORDINATION WITH SAGIT PUD.
 - ALL MATERIALS ARE TO BE APPROVED BY SAGIT PUD PRIOR TO CONSTRUCTION.
 - DUCTILE IRON PIPE TO BE CLASS 50 ANSII/AWWA C151/ASTM A151. ALL JOINTS TO BE RUBBER GASKETS WITH PUSH-ON TYPE OR MECHANICAL JOINT MEETING AWWA SPECIFICATIONS.
 - ALL VALVES TO BE RESILIENT WEDGE GATE VALVES.
 - ALL FIRE HYDRANTS TO BE GLOW MEDALLION FIRE HYDRANTS AND INSTALLED AS PER DETAILS ON THE PLANS.
 - ALL WATER INSTALLATIONS REQUIRE 42-INCH MINIMUM COVER TO ANTICIPATED FINISH GRADE.
 - MINIMUM 1 FOOT VERTICAL CLEARANCE BETWEEN WATERLINE AND ALL OTHER UTILITIES.
 - BEDDING MATERIALS FOR THE DUCTILE IRON PIPE MAY BE SELECTED NATIVE GRANULAR MATERIAL FREE FROM WOOD WASTE, ORGANIC MATERIAL, OR OTHER EXTRANEOUS OR OBJECTIONABLE MATERIALS AND SHALL HAVE A MAXIMUM PARTICLE DIMENSION OF 2-INCHES. BEDDING SHALL BE PLACED IN 4-INCH LAYERS. BACKFILL TRENCH IN PAVEMENT AREAS WITH PIT-RUN GRAVEL COMPACTED IN 4-INCH LIFTS.
 - CONDUIT THROST BLOCKING FOR ALL FITTINGS TO BE AS PER DETAILS AS SHOWN ON THE PLANS.
 - CONTRACTOR WILL INSTALL THE SERVICE TAP AND SERVICE CROSSING. THE SERVICE LINE WILL BE 200 P.S.I. 1-INCH POLYETHYLENE TUBING IF 3/4-INCH BY 3/4-INCH METER IS INSTALLED. ALSO INSTALL COPPER TRACER WIRE AS PER SAGIT PUD RESOLUTION NO. 1626-94. TUBING MUST EXTEND 3 TO 4 FEET ABOVE THE GROUND AND BE ATTACHED TO A SUPPORT POST 4-INCH BY 4-INCH BOARD OR METAL T-FENCE POST.
 - FOR OTHER MATERIALS NEEDED FOR THE SERVICE LINES, SEE SAGIT PUD DETAIL.
 - TEST DATE: _____ TEST PRESSURE: _____
TIME START: _____ TIME END: _____
PRESSURE DROP: _____ MAKE UP WATER: _____
 - BLOCK ALL FITTINGS WITH PORTED CONCRETE ACCORDING TO THE SAGIT PUD STANDARD DETAIL.
 - PLACE 2 INCHES OF M-TEST HYPO-CHLORITE GRANULES, IN THIS PIPELINE FOR EVERY 100 FEET OF 8 INCH PIPE. AFTER INSTALLATION, SOAK A MINIMUM OF 24 HOURS AND AS PER W.S.D.O.T. STANDARDS. USE DEMONSTRATION EQUIPMENT WHEN FLUSHING OR FLUSH INTO SANITARY SEWER MANHOLES. DO NOT FLUSH INTO, OR ALLOW TO DRAIN INTO ANY CREEKS OR SURROUNDING CATCH BASINS.
 - COORDINATE ALL SHUTDOWNS, FLUSHING, AND HEALTH SAMPLES WITH SAGIT PUD INSPECTORS.
 - A PRE-CONSTRUCTION CONFERENCE MUST BE SCHEDULED BY THE PRIVATE CONTRACTOR WITH THE DISTRICT'S CHIEF INSPECTOR, JERRY LANGE, PRIOR TO CONSTRUCTION.
 - ALL DUCTILE IRON WATER PIPELINE ON THIS PROJECT MUST BE WRAPPED WITH POLYETHYLENE PIPE ENCASEMENT WHICH IS A MINIMUM OF 8-MIL THICK. IT MUST BE INSTALLED AS PER W.S.D.O.T. STANDARDS AND IN ACCORDANCE WITH AWWA C105.

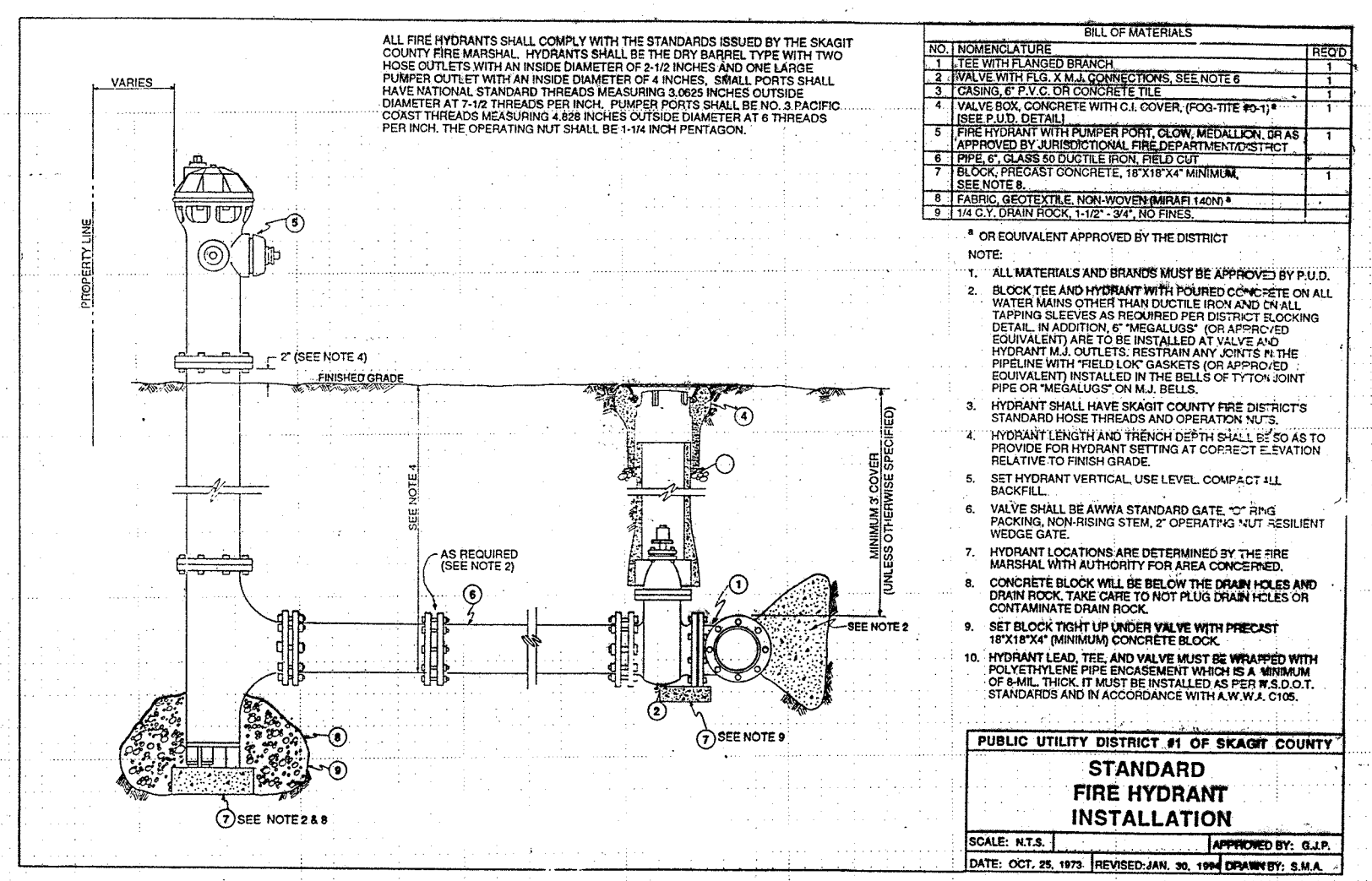


NOTE: THE WATER PIPELINE MUST BE A MINIMUM 10 FEET FROM THE SANITARY SEWER IN ALL CASES.

SKAGIT COUNTY PUBLIC UTILITY DIST. 1

TABLE 1: STANDARD INSTALLATION OF CONCRETE VALVE BOX & VALVE OPERATING NUT EXTENSION

TABLE 2: HORIZONTAL THROST BLOCKING DETAIL

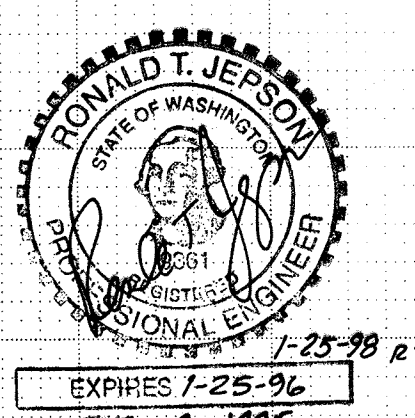


- SKAGIT P.U.D. GENERAL NOTES:
- THE UTILITY LOCATIONS MARKED ON THIS MAP ARE APPROXIMATE. THE CONTRACTOR IS TO VERIFY ACTUAL LOCATION AND DEPTH, PRIOR TO CONSTRUCTION.
 - WHEN INSTALLING WATER PIPELINE ACROSS EXISTING OR PROPOSED SANITARY SEWER, A FULL LENGTH OF PIPE SHOULD BE INSTALLED WITH MIDSPAN OF PIPE OVER THE SEWER.
 - ANY PERMITS OR OTHER REQUIREMENTS THAT WILL BE NEEDED TO DO THIS PROJECT WILL BE THE RESPONSIBILITY OF THE DEVELOPER.
 - AFTER THE SAGIT P.U.D. TIE-IN WORK TO THE EXISTING WATERLINE, THE PRIVATE CONTRACTOR IS TO BACKFILL THE TRENCH AND MAKE ALL NECESSARY ASPHALT REPAIR.

GENERAL NOTES

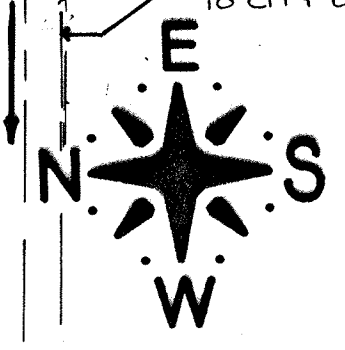
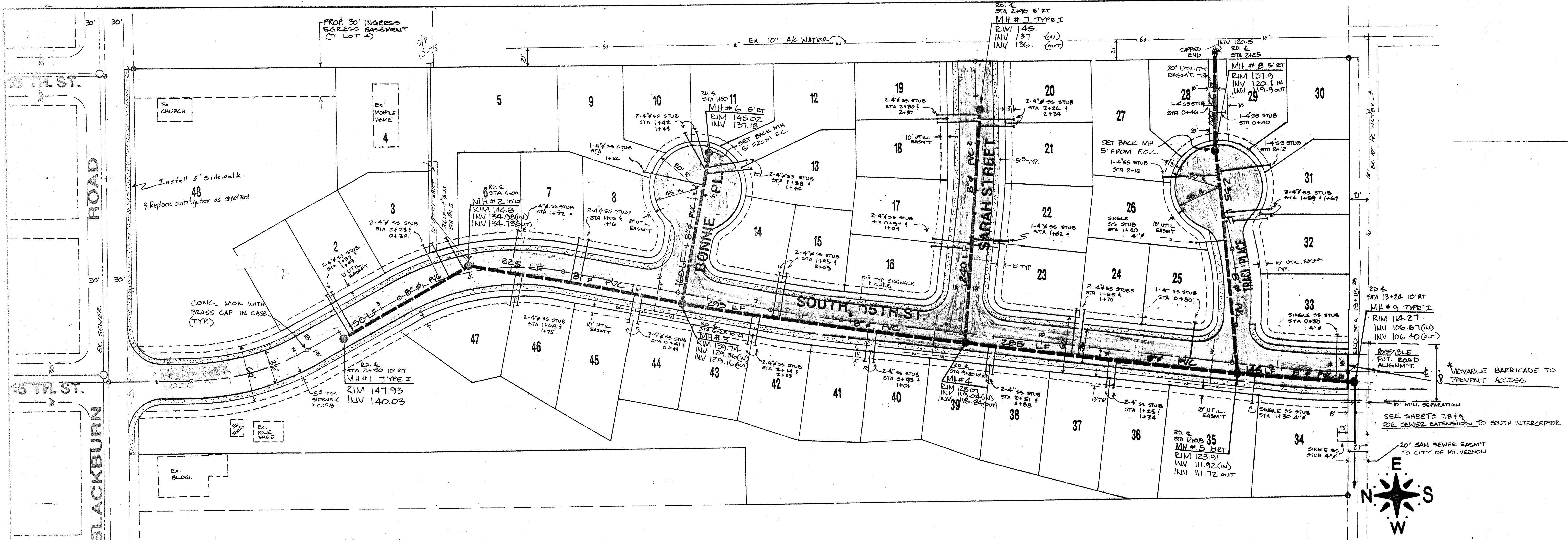
- 1) WATER PRESURE TESTING TO 240 PSI PER W.S.D.O.T. STD'S
- 2) HYDRANT SHALL BE "MEDALLION" BRAND
- 3) WATER PIPE SHALL BE WRAPPED
- 4) STUBS MAY BE POLYETHYLENE 200 PSI RATED NEED TRACER WIRE.
- 5) 48" MAX COVER OVER PIPE.

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ASST. CITY ENGINEER
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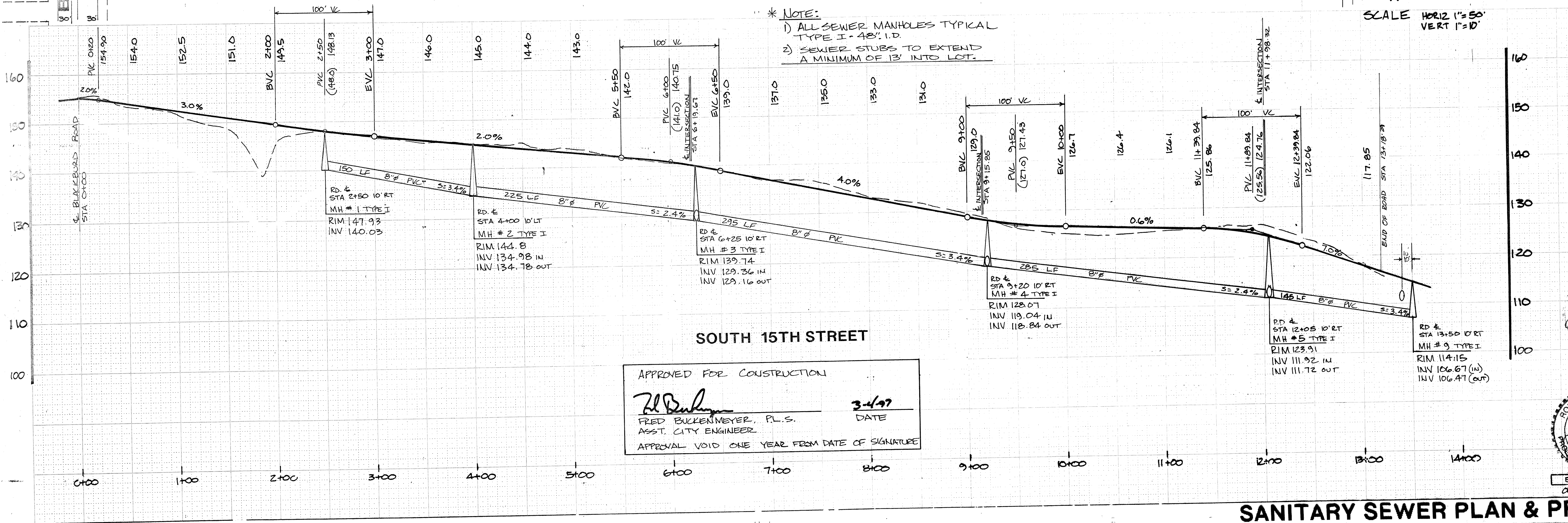
WATER SYSTEM

SUB 94-1
BLACKBURN RIDGE



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

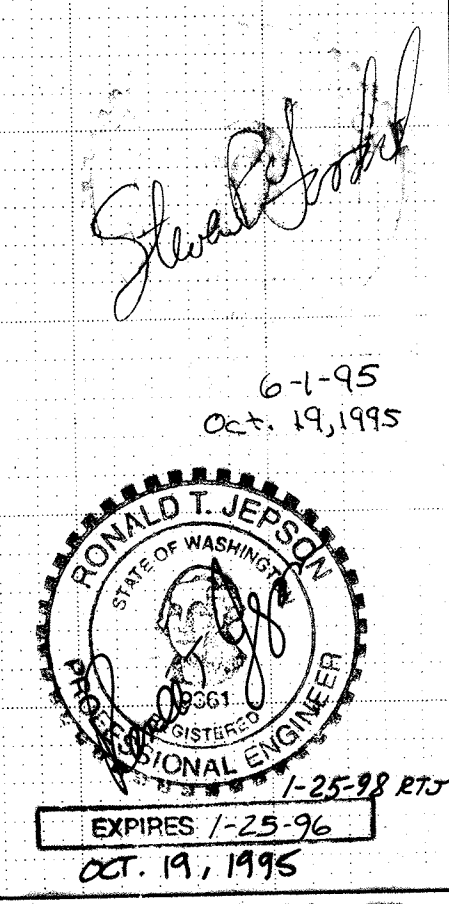
- * NOTE:
- 1) ALL SEWER MANHOLES TYPICAL TYPE I - 48" I.D.
 - 2) SEWER STUBS TO EXTEND A MINIMUM OF 13' INTO LOT.



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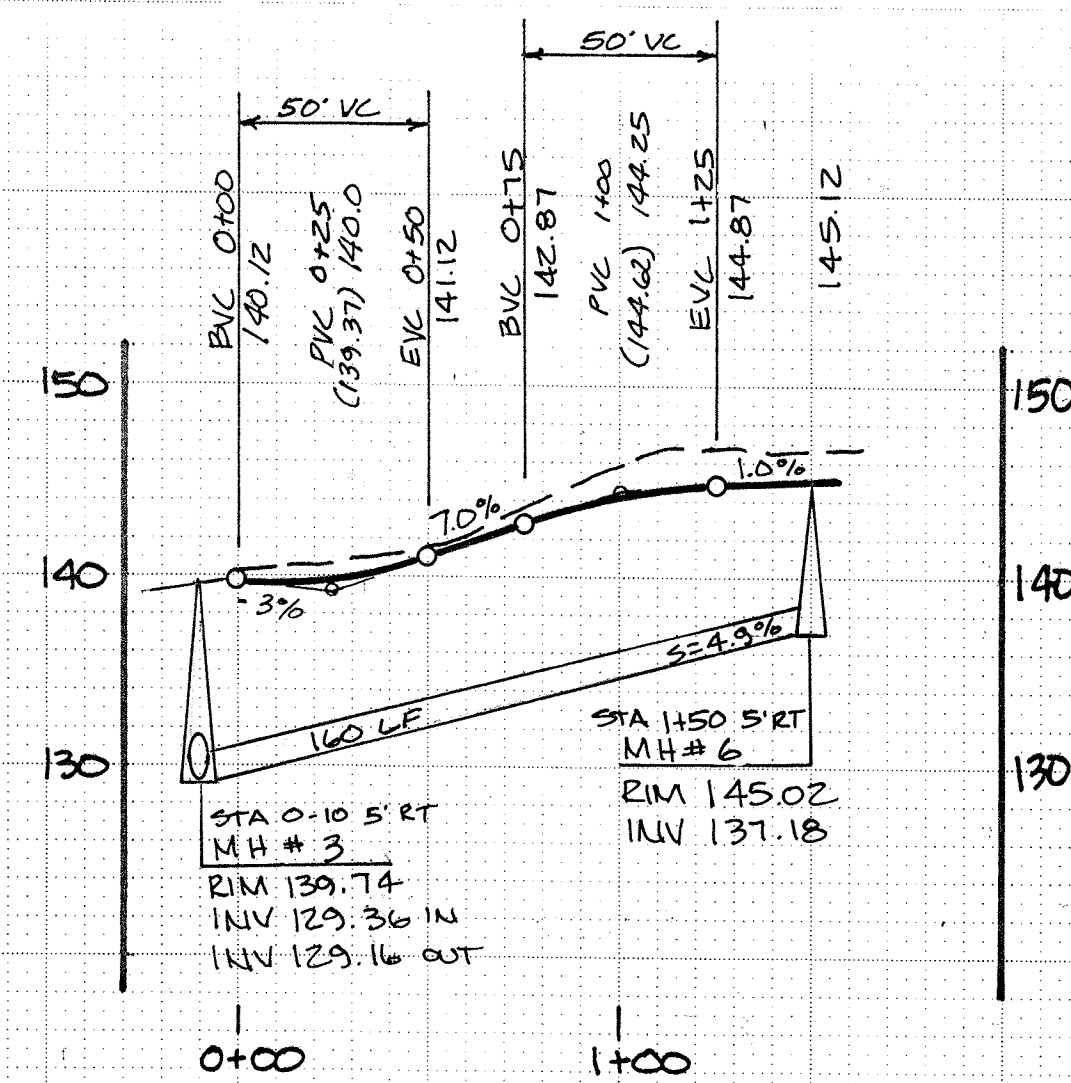
Fred Buckenmeyer 3-4-97
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE

APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

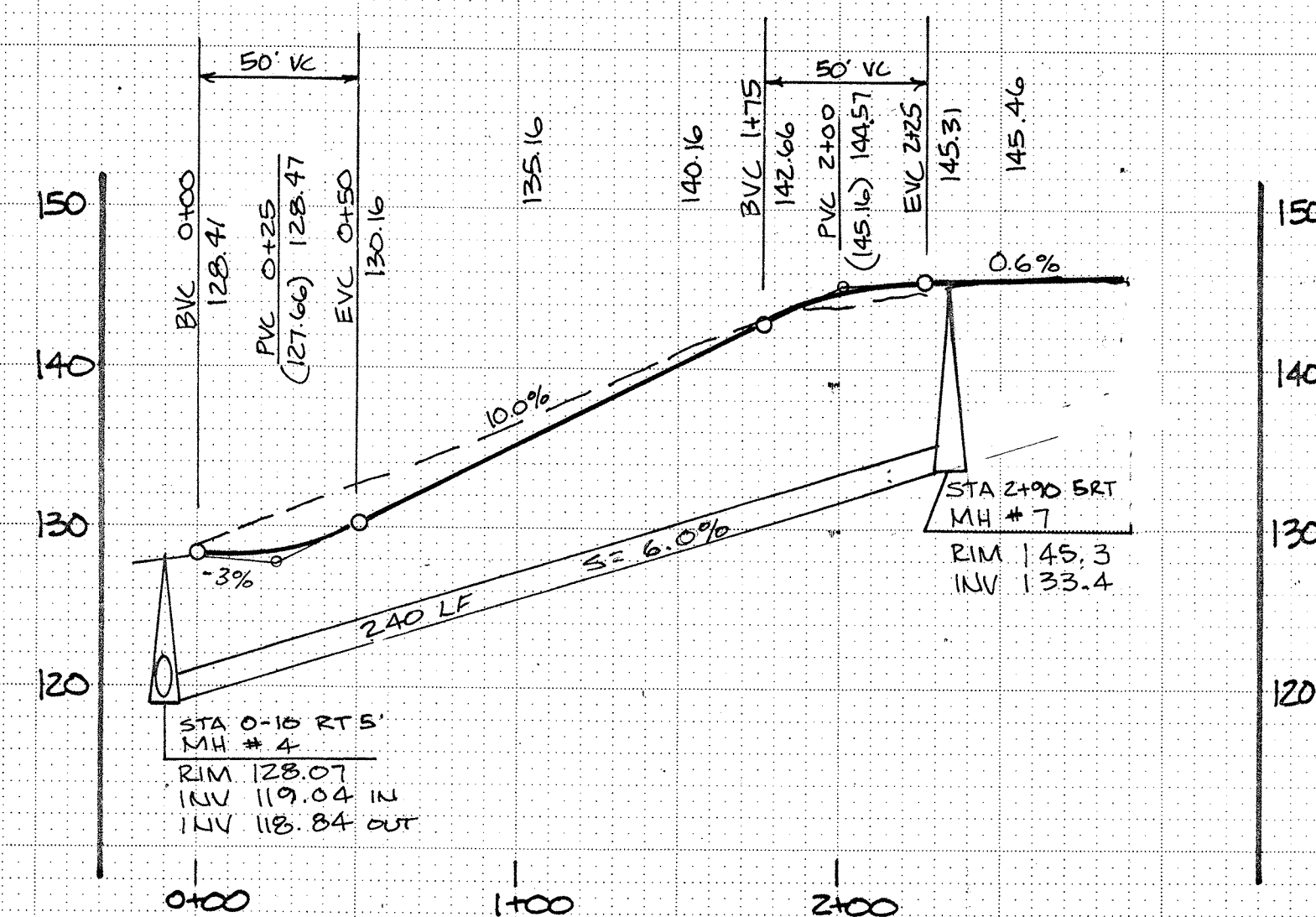


SANITARY SEWER PLAN & PROFILE

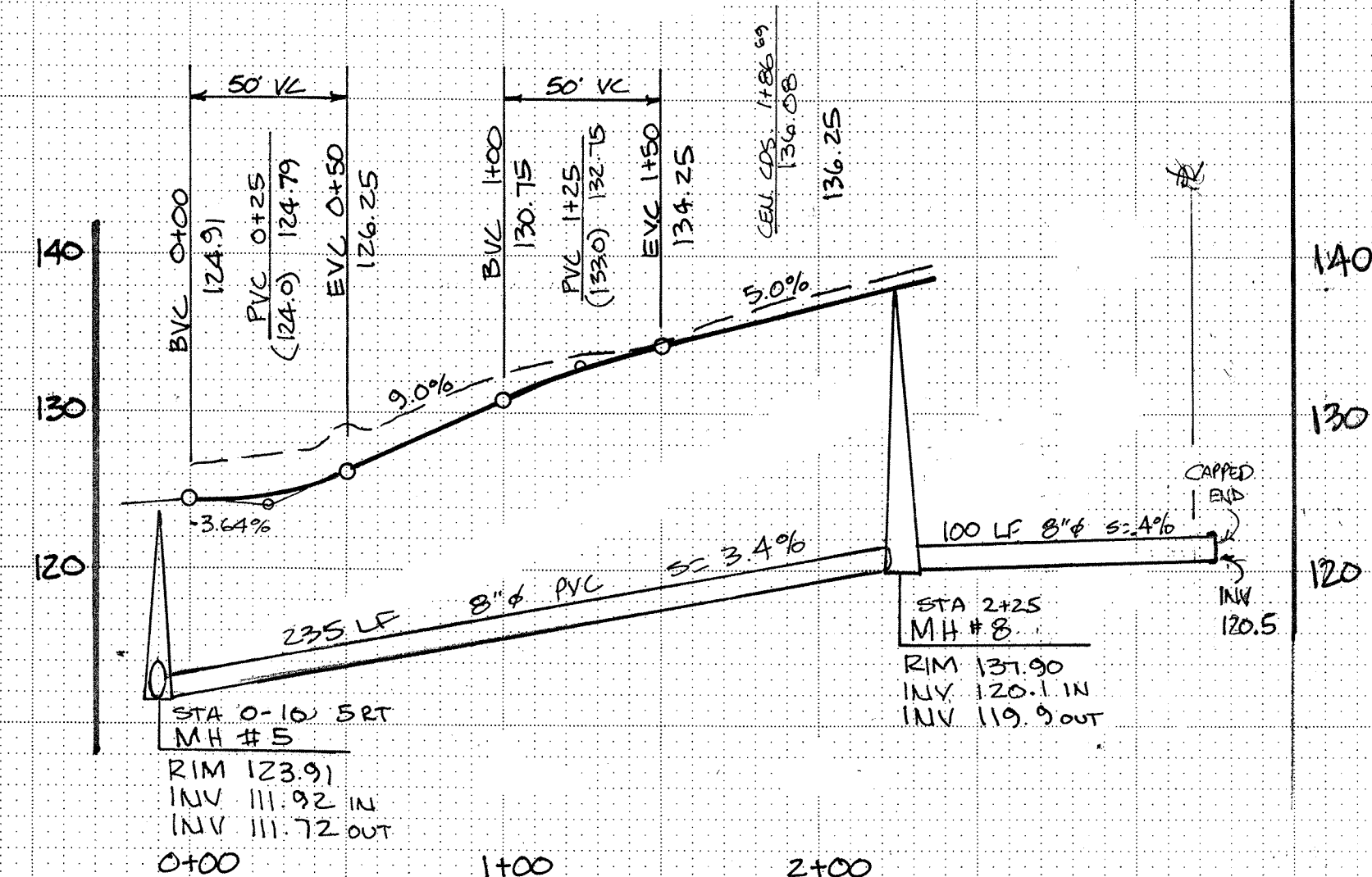
SANITARY
SUB 94-2
BLACKBURN RIDGE



BONNIE PLACE



SARAH STREET

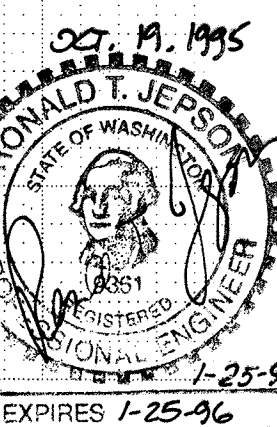


TRACI PLACE

APPROVED FOR CONSTRUCTION
Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE 3-4-97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

Stuart Smith

6-1-96
Oct 19, 1995



RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND AVE, SUITE C, BELLINGHAM, WA.
206-733-5760

SCALE 1"=30' DATE 1-95
DRAWN BY J.E.
CHECKED BY B.Y.
APPROVED R.T.J.

REVISIONS

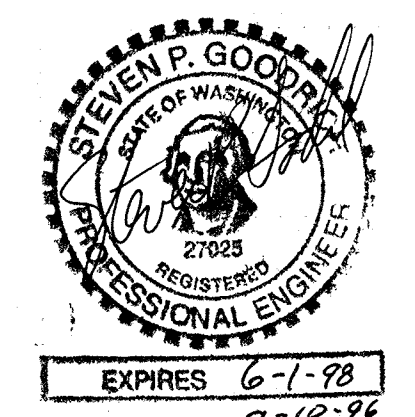
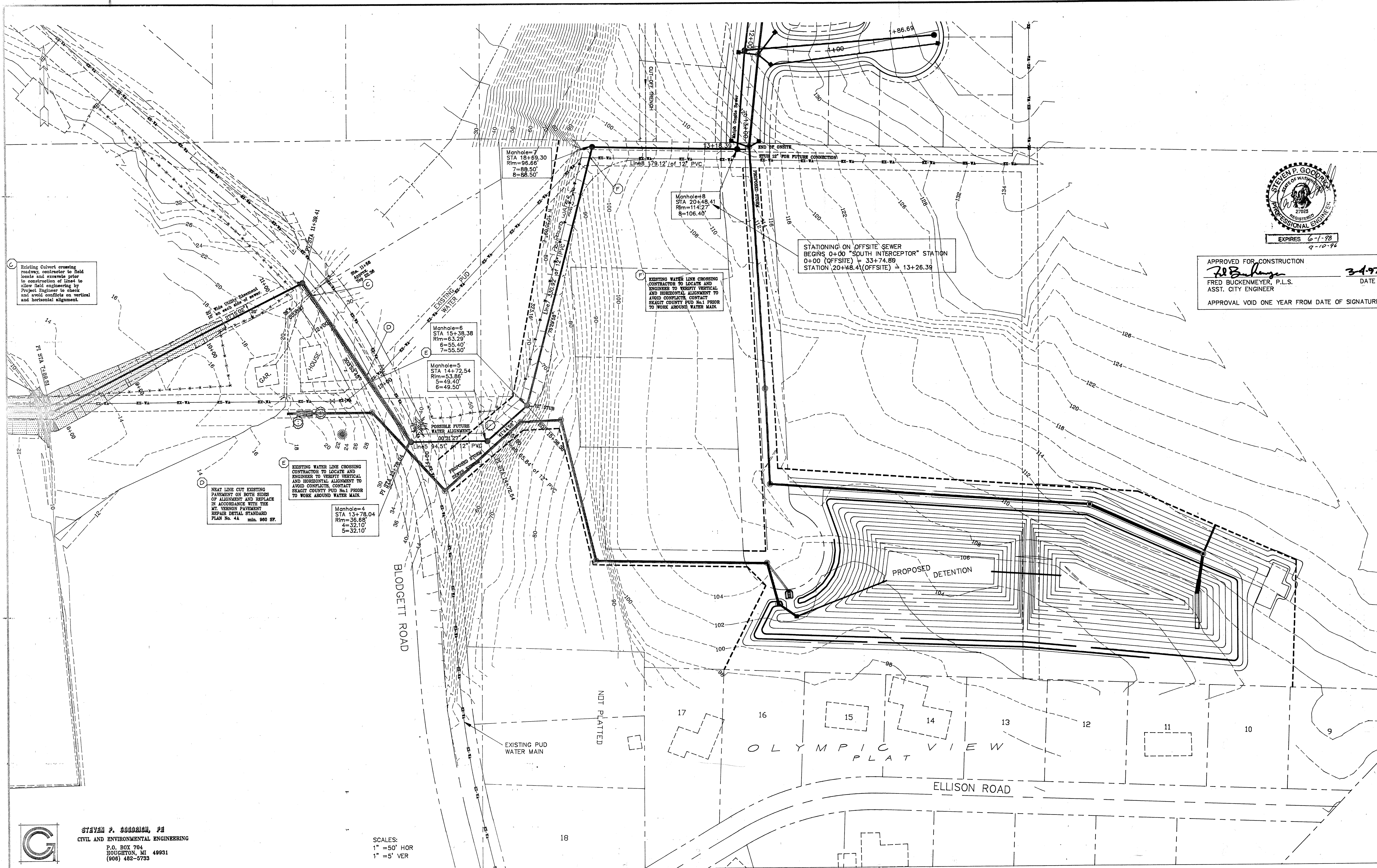
CLIENT:
BLACKBURN PROPERTIES INC.

BLACKBURN RIDGE

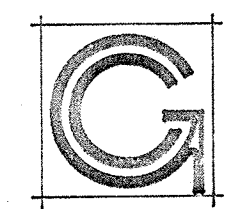
SANITARY SEWER PROFILE

JOB NO. 94111

OFFSITE SANITARY SUB 9A-2
BLACKBURN RIDGE



APPROVED FOR CONSTRUCTION
Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE 3-1-97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE



STEVEN P. GOODRICH, PE
CIVIL AND ENVIRONMENTAL ENGINEERING
P.O. BOX 704
BOUGHTON, MI 49831
(906) 482-5733

SCALE:
1" = 50' HOR
1" = 5' VER

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE 1"=50'
DRAWN BY SPG
CHECKED BY
APPROVED BY
DATE 8/12/95

REVISION
6-27-96
2
3

CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE IMPROVEMENT PLANS
OFFSITE SANITARY SEWER
PLAN 13+78.00 TO 20+48.37

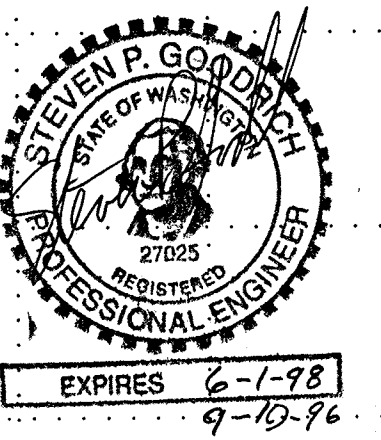
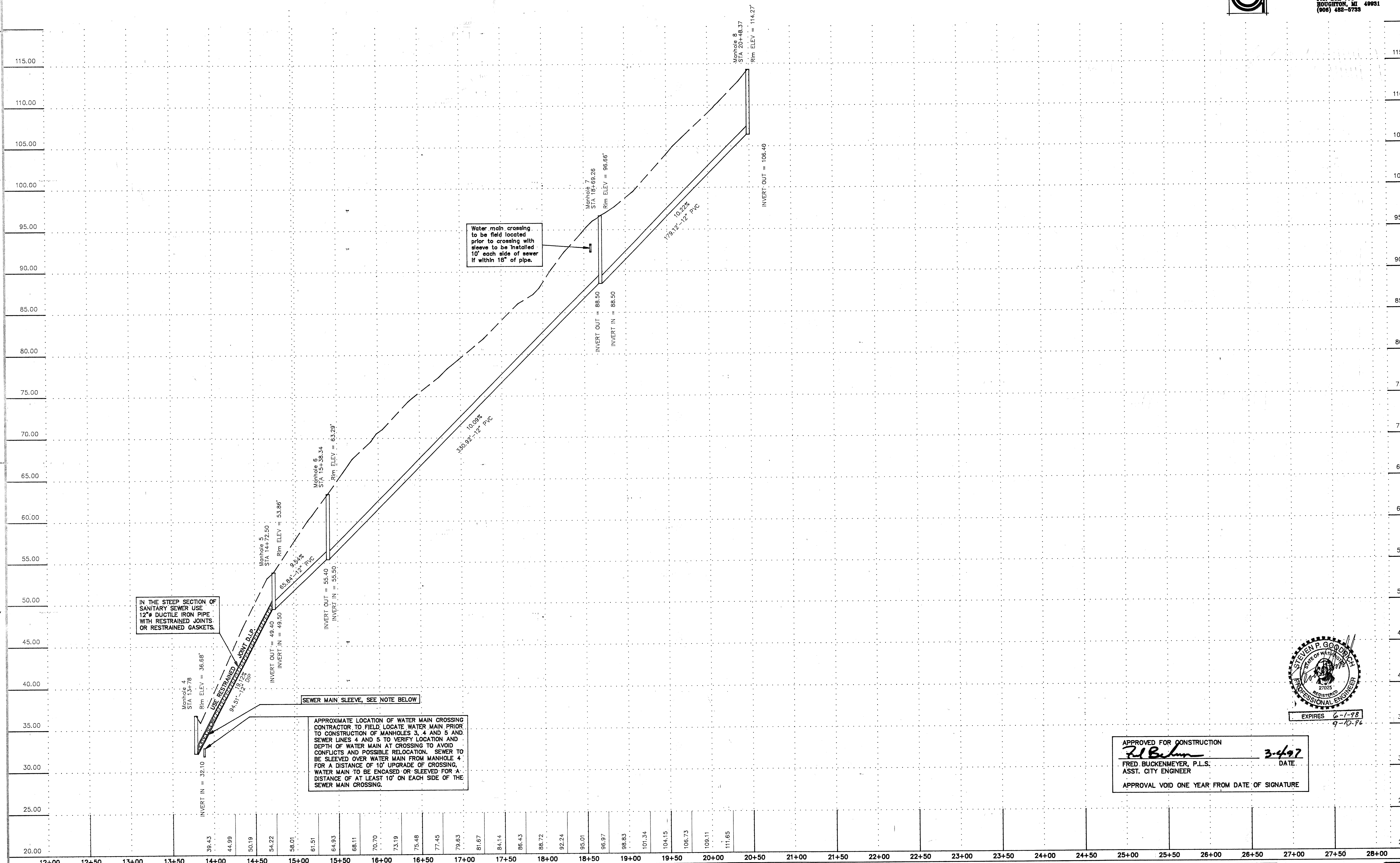
RTJ-94111

File name: D:\J058\941107\SS020101



STEVEN P. GOODRICH, P.E.
CIVIL AND ENVIRONMENTAL ENGINEERING
P.O. BOX 704
HOUGHTON, MI 49931
(506) 482-5735

OFFSITE SANITARY SUB 94-2
BLACKBURN RIDGE



APPROVED FOR CONSTRUCTION
Fred Buckenmeyer 3-4-97
FRED BUCKENMEYER, P.L.S. DATE
ASST. CITY ENGINEER
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS 222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE 1"=50'
DRAWN BY SPG
CHECKED BY
APPROVED BY
DATE 8/12/95

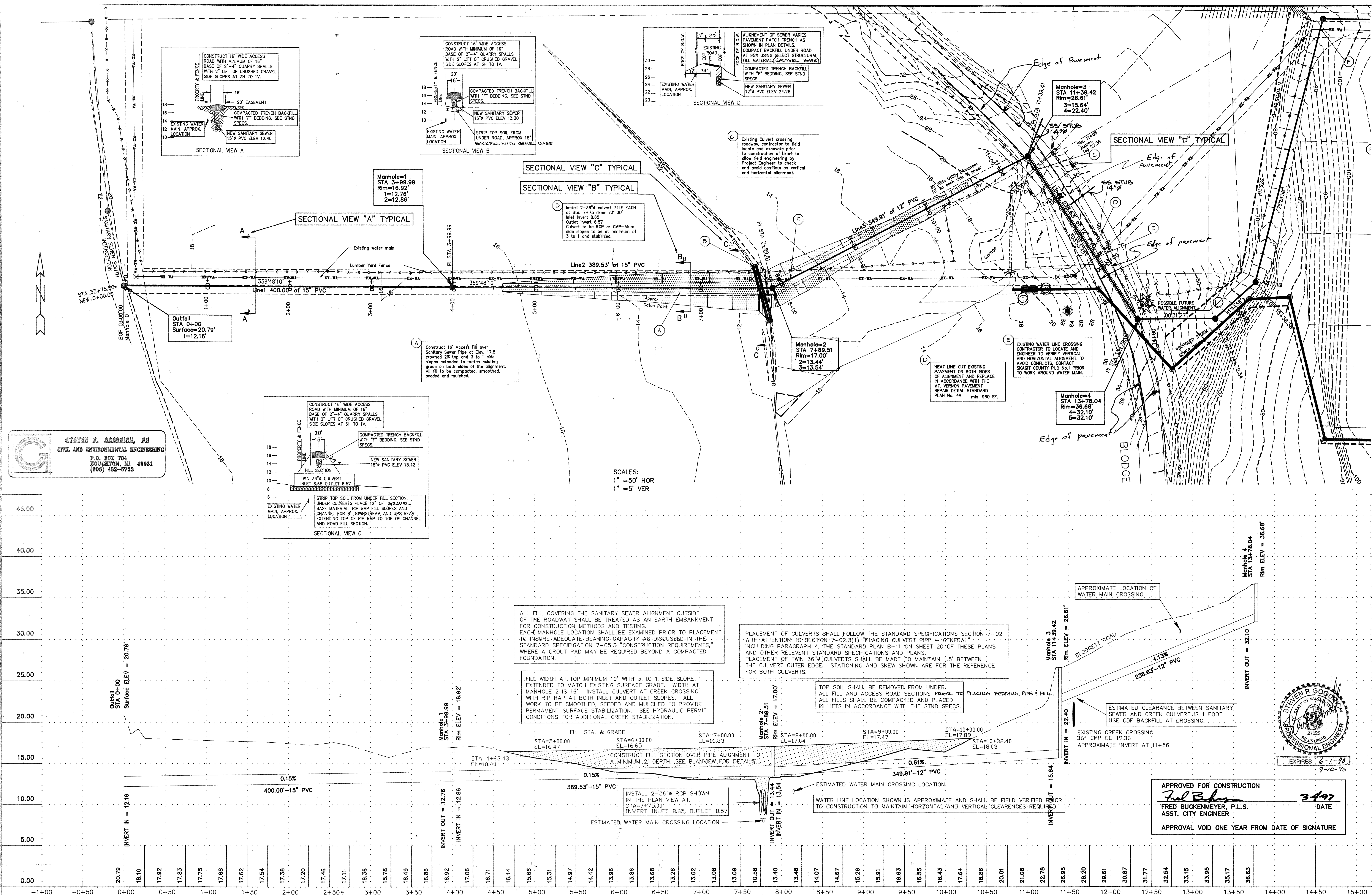
REVISION
6-27-96 SPG
2
3

CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE IMPROVEMENT PLANS
OFFSITE SANITARY SEWER
PROFILE 13+78.04 TO 20+48.77

RTJ-94111

OFFSITE SANITARY SEWER SUB 94.2
BLACKBURN RIDGE



RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE	1"=50'
DRAWN BY	SPG
CHECKED BY	
APPROVED BY	
DATE	12/8/95

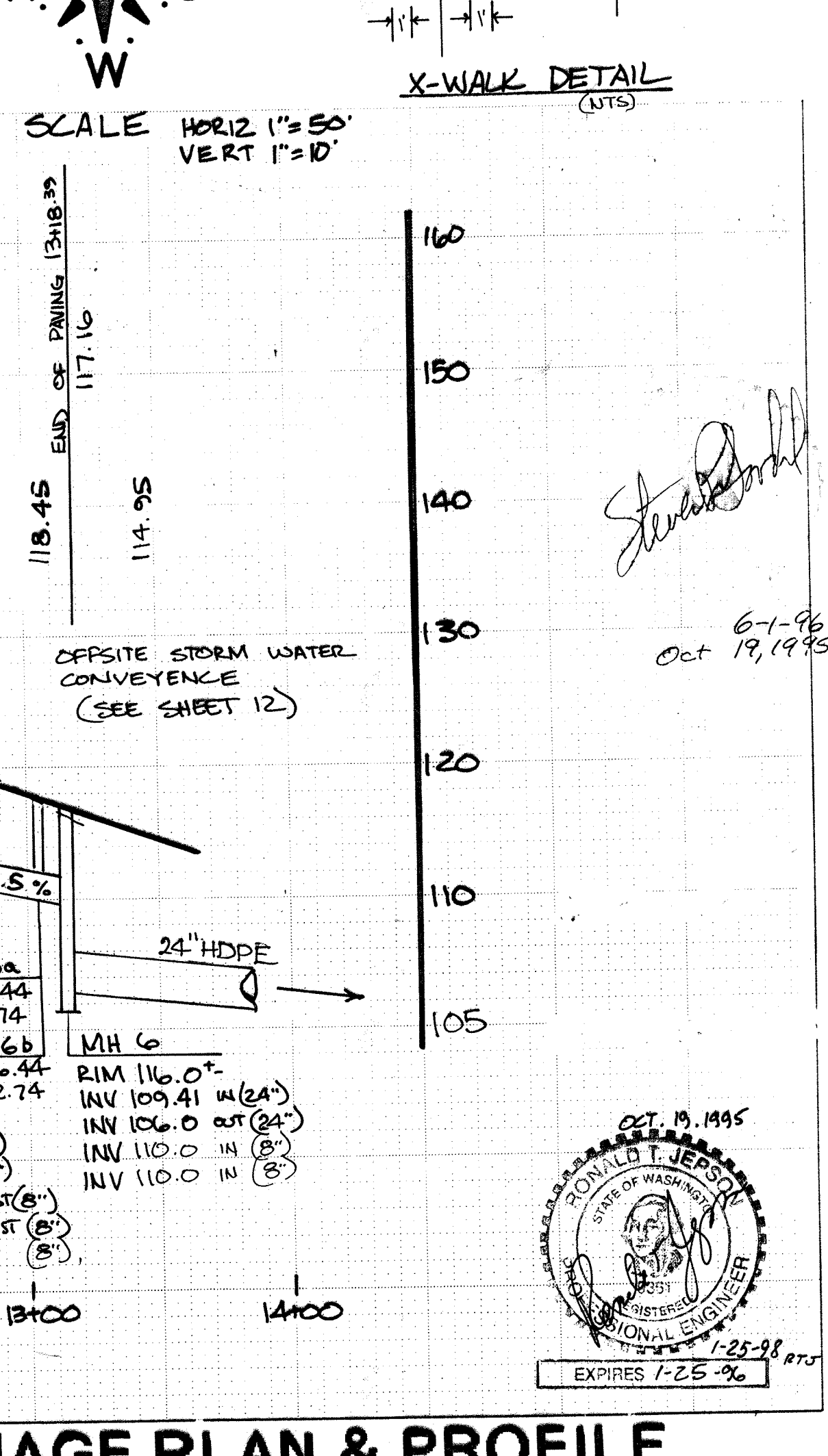
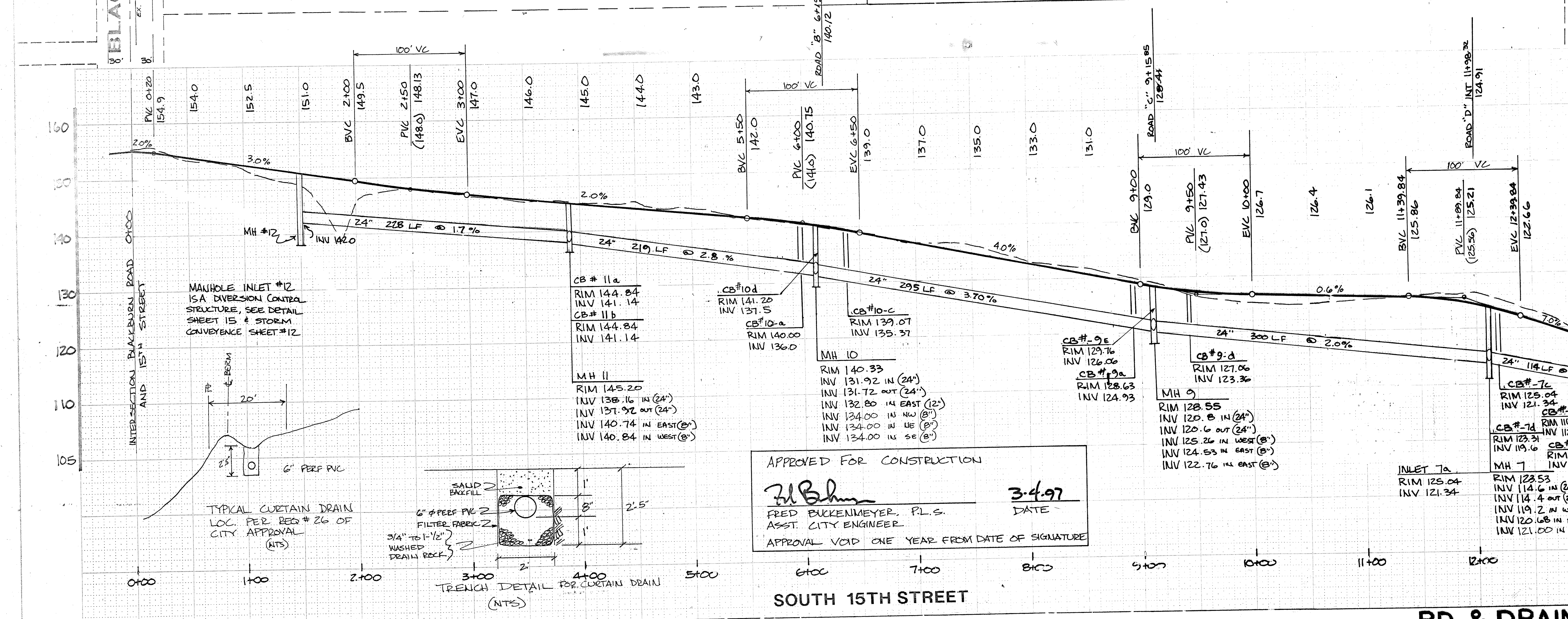
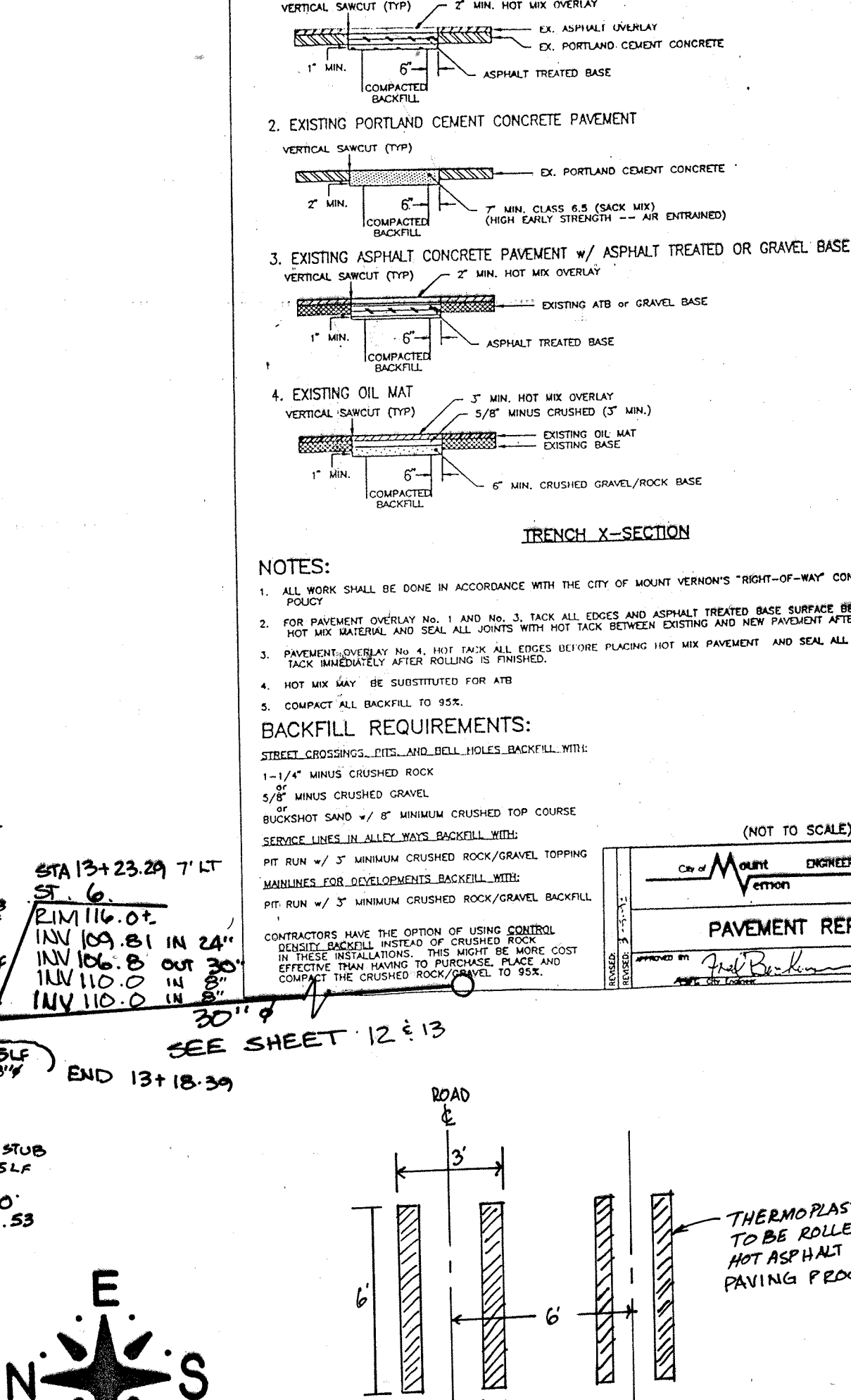
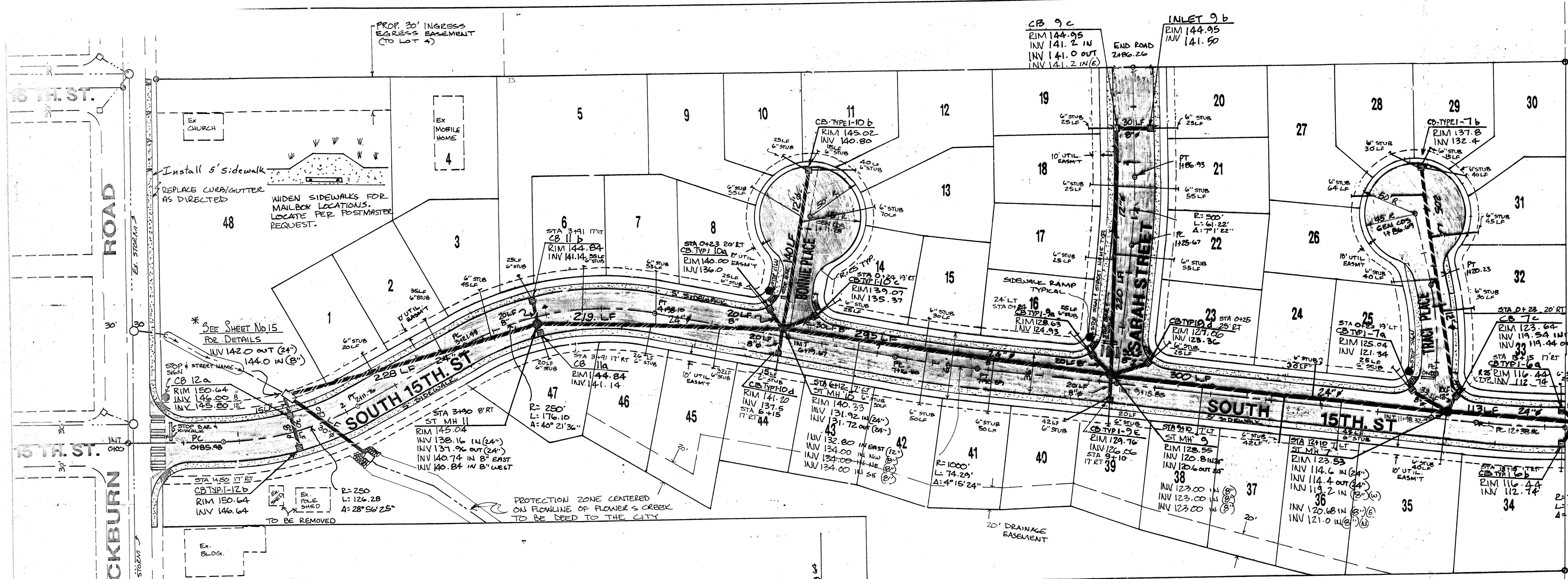
REVISION	
9-9-96	S.P.G.
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CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

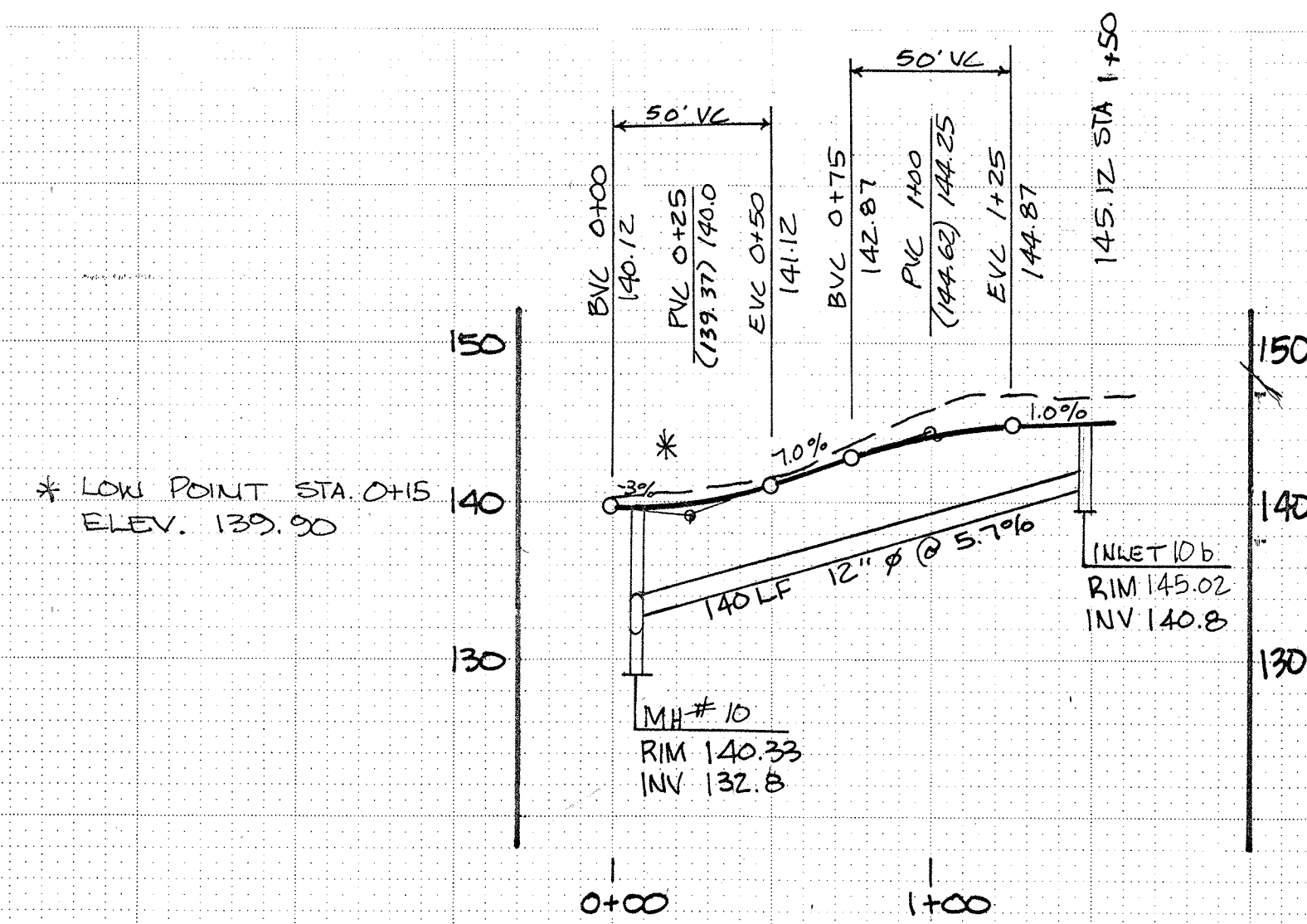
BLACKBURN RIDGE IMPROVEMENT PLANS
OFFSITE SANITARY SEWER
PLAN & PROFILE 0+00 TO 13+78.04

RTJ-94111
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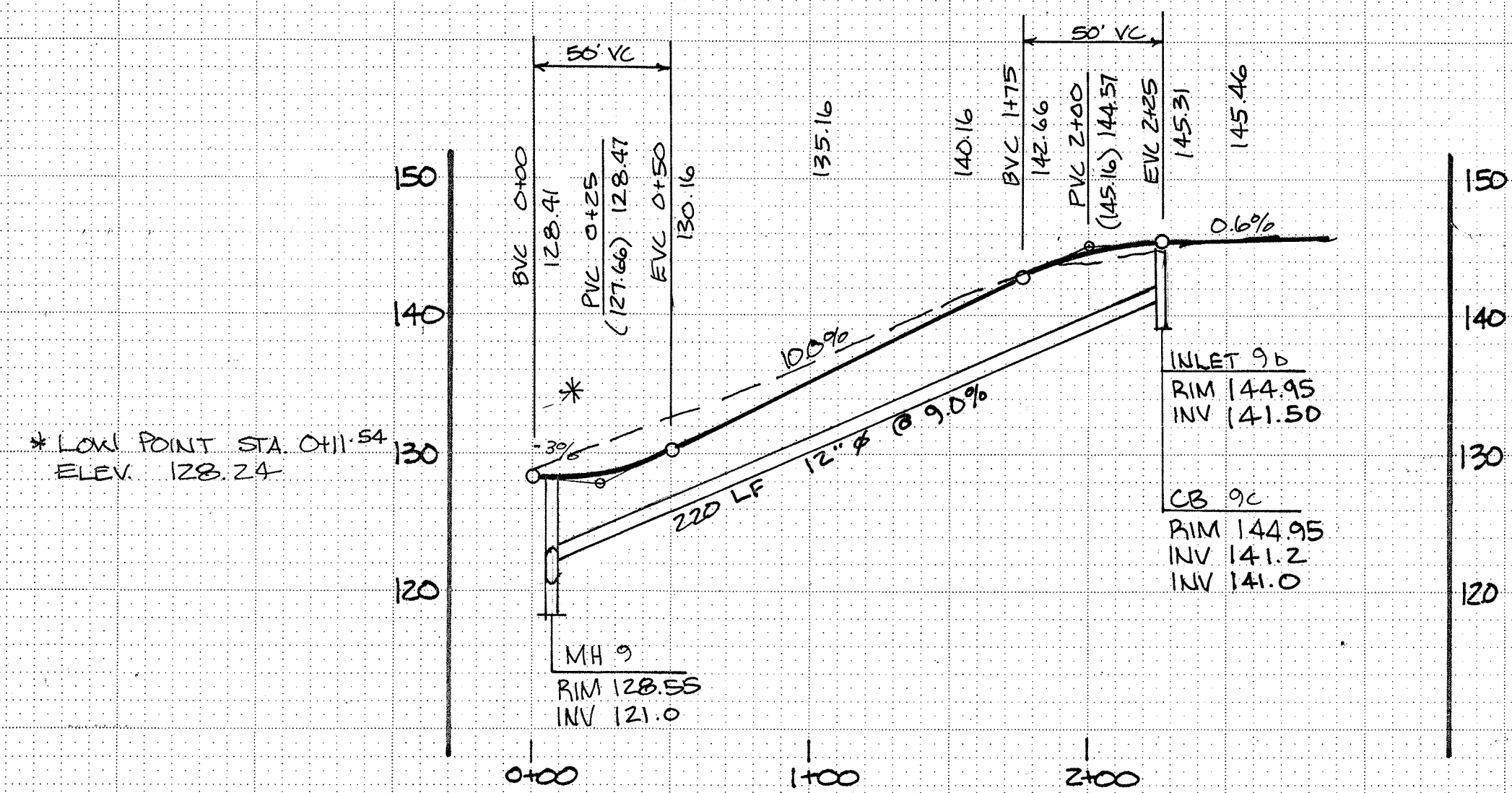
RD & DRAINAGE
BLACKBURN RIDGE



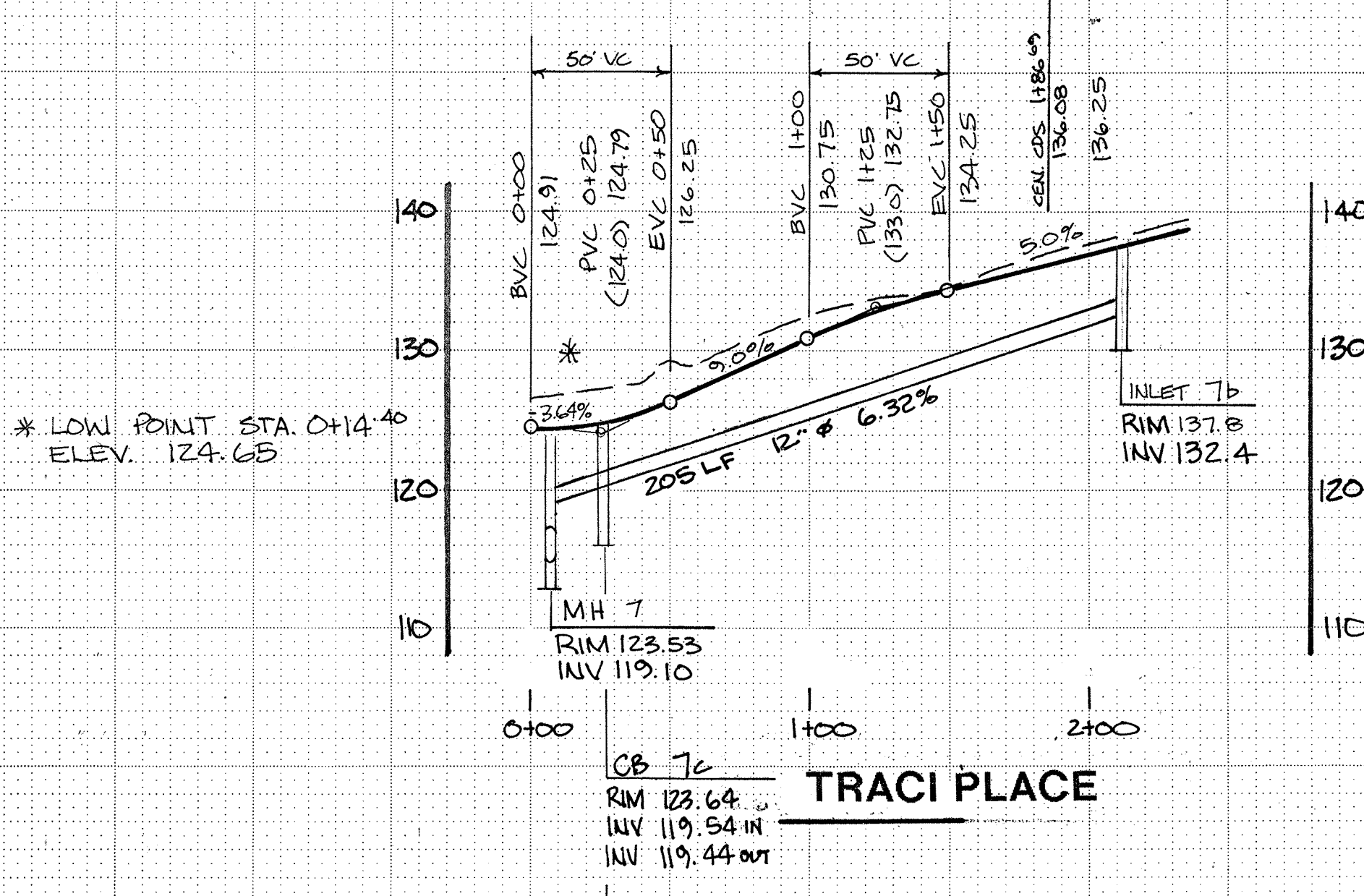
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BLACKBURN RIDGE



BONNIE PLACE



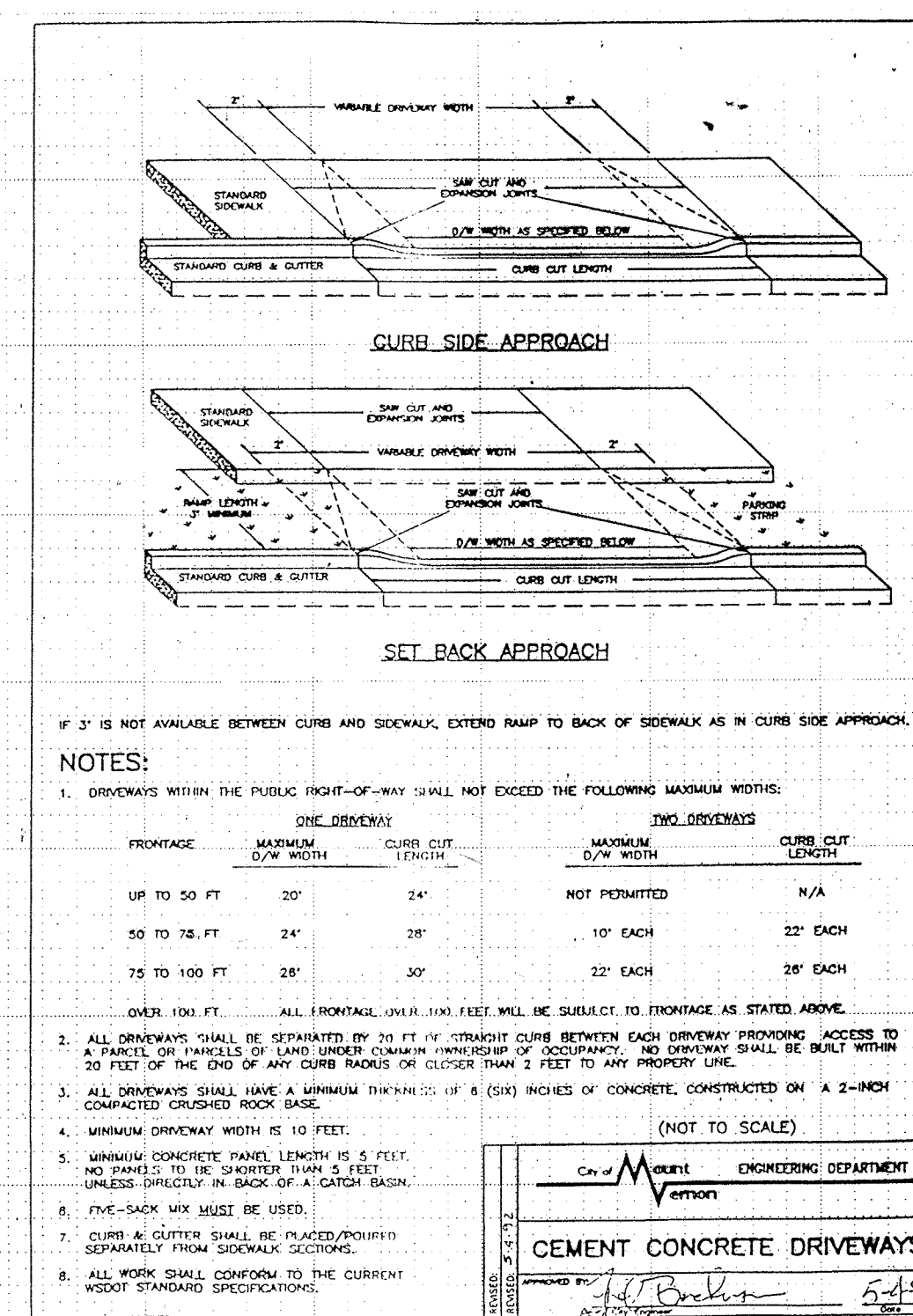
SARAH STREET



TRACI PLACE

* NOTE

ALL CATCH BASINS AND INLETS AT INTERSECTION CURB RETURNS SHALL BE LOCATED AT LOW SPOT CREATED BY INTERSECTING CURB GRADES, AND SHALL HAVE THRU-CURB GRATES.

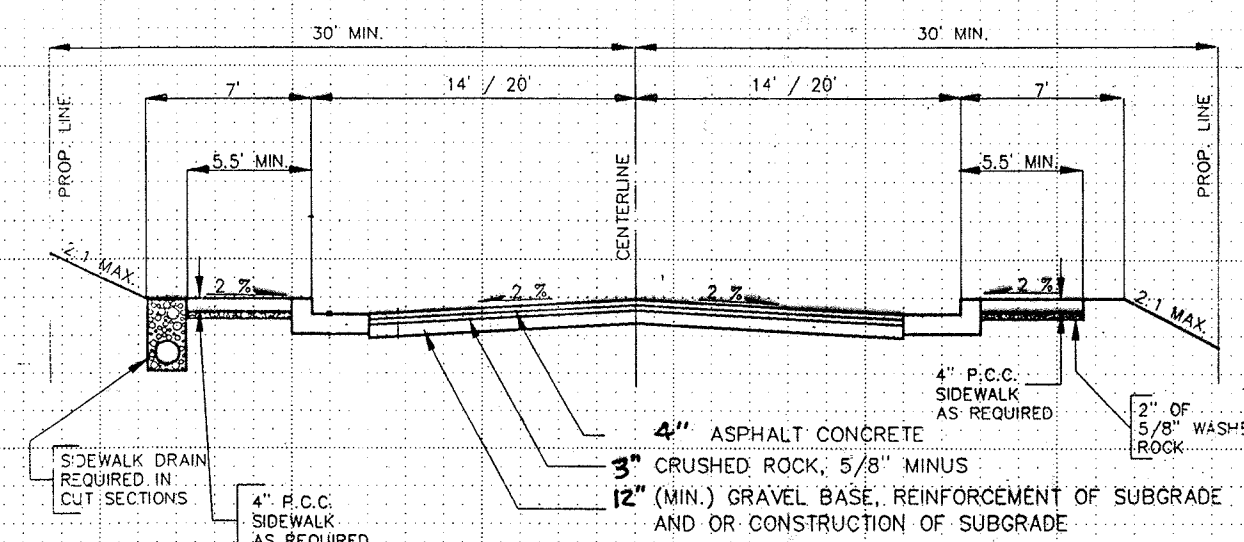


SPECIFICATIONS FOR TESTING ASPHALT

- Prior to placement of pavement the City shall make a determination of sub-grade acceptance based on test results and the observations of a firm and unyielding surface. The City shall also establish test area boundaries. The contractor shall supply the City with a mix design including values for the theoretical maximum density of the asphalt being used on the project.
- Specification for minimum allowable density for asphalt is 92% of the theoretical maximum density as determined by AASHTO test method T 209.
- The point of acceptance is when the asphalt reaches 175 degrees F.
- When the contractor indicates that the pavement is ready for acceptance or it reaches 175 degrees F, whichever is sooner, the City shall take/supervise 5 nuclear densometer readings at random locations within every test area. A test area shall not exceed 300 tons of asphalt, however, smaller areas may be determined, such as cul-de-sacs may be singled out as a test area or individual streets within a street network may be singled out as test areas, even though these areas would be less than 300 tons.
- The results of the densometer readings for each test area shall be evaluated and the average applied to the entire test area. If the average is below minimum, the owner may request core tests to be taken at his expense and at locations determined by City personnel, within 24 hours of the final paving of the test area. Five core tests shall be taken for each test area and the results evaluated and the average applied to the whole test area.
- If the pavement is below minimum compaction subsequent to the final testing procedures, the owner may increase depth of the final lift of asphalt as directed by the City Engineer, or provide payment to the City as directed by the City Engineer.
- All isolated areas within test areas that fall below 88.0% shall be subject to extensive testing and subsequent removal of the asphalt, unless otherwise directed by the City Engineer.
- The use of a correction factor to correct density readings obtained from the nuclear densometer, is acceptable upon authorization by the City Engineer in the following instances: 1) first lift overlays on existing pavement; 2) first course over granular material.

June 1, 1994
Fred Buckenmeyer, Assistant City Engineer

- CITY OF MOUNT VERNON
STREET STRIPING AND SIGN STANDARDS
- ALL SIGNS
SHALL CONFORM TO THE CURRENT M.U.T.C.D. SPECIFICATIONS
SHALL HAVE DIAMOND GRADE ON ALDINE TREATED ALUMINUM SIGN BLANKS WITH ALLOY AND THICKNESS TO MEET W.S.D.O.T. SPECIFICATIONS (HIGH INTENSITY GRADE MAY BE ALLOWED AT THE CITY ENGINEER'S DISCRETION)
- ALL POSTS
2-INCH INSIDE DIAMETER
SCHEDULE 40 GALVANIZED PIPE
ANCHORED IN CEMENT CONCRETE IN A 12-INCH DIAMETER HOLE 30-INCHES DEEP
- STOP SIGNS
3M DIAMOND BACKGROUND AND LETTERING, OR EQUAL
30-INCHES WIDE AND 30-INCHES HIGH
- STREET NAME SIGNS
EXTRUDED BLADES 9-INCHES WIDE
SIGN CENTERED ON POST ATTACHED WITH TOP BRACKETS
ALL LETTERS SHALL BE 6-INCHES AND CAPITALIZED
LETTERING ON BOTH SIDES OF BLADES
3M DIAMOND BACKGROUND AND LETTERING, OR EQUAL
EXAMPLE OF LETTERING FORMAT: S. 20TH ST.
GREEN BACKGROUND FOR PUBLIC STREETS -OR- YELLOW BACKGROUND FOR PRIVATE STREETS
- STOP BAR
3M STAMARK INTERSECTION GRADE, TAPE SERIES 420, OR EQUAL PRESSED INTO ASPHALT CONCRETE
- STRIPING
GLASS BEAD IMPREGNATED PAINT



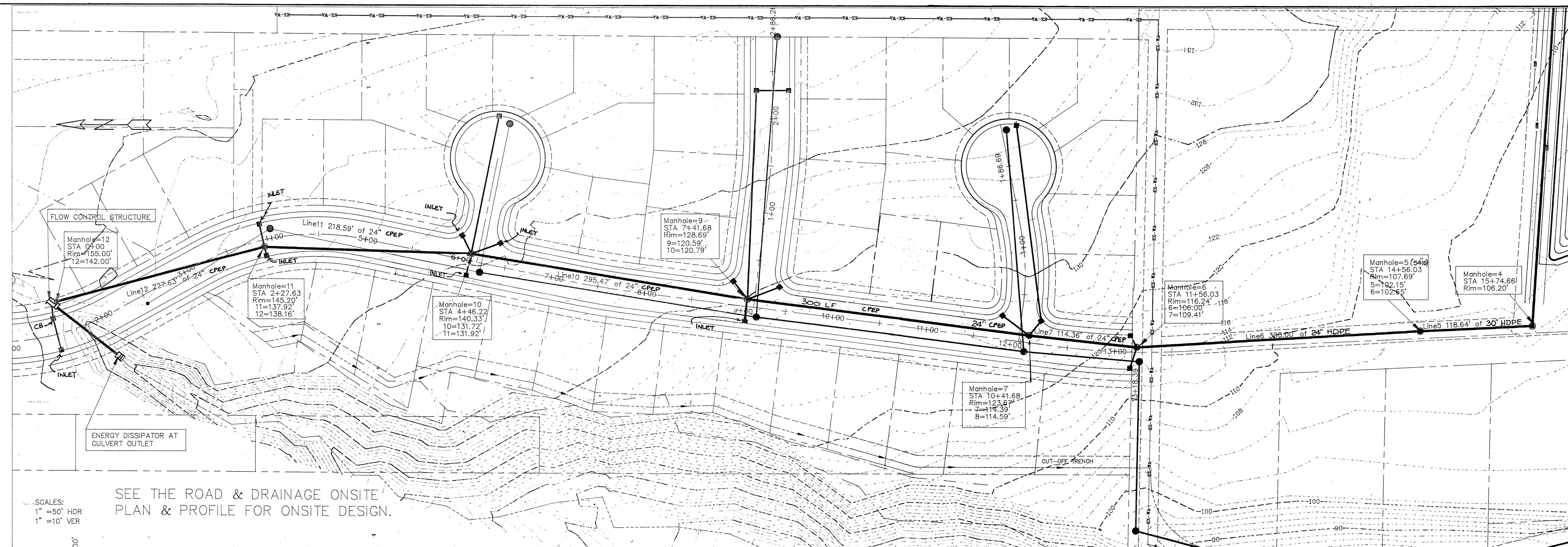
Note: Geotextile Fabric - Typar 3201 or Equal Required below Gravel on Subgrade. Under Roadway area only. (Unless otherwise approved by the City Engineer)

- NOTE
- ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE PROVISIONS OF A.P.W.A. "STANDARD SPECIFICATIONS" AND SHALL CONFORM TO THE REQUIREMENTS OF THE CITY ENGINEER.
 - AN EQUIVALENT ASPHALT TREATED BASE MAY BE SUBSTITUTED FOR THE GRAVEL BASE AND CRUSHED ROCK UPON APPROVAL OF THE CITY ENGINEER.
 - ON CUL-DE-SACS OF LESS THAN 800' R/W MAY BE REDUCED TO 50' AND STREET WIDTH MAY BE REDUCED TO 24'.
 - ROLLED CURB MAY BE SUBSTITUTED FOR VERTICAL CURB UPON APPROVAL OF THE CITY ENGINEER.
 - SETBACK SIDEWALK MAY BE USED UPON APPROVAL OF THE CITY ENGINEER. ROLLED CURBS SHALL NOT BE USED IN CONJUNCTION WITH SETBACK SIDEWALKS.

APPROVED FOR CONSTRUCTION
Fred Buckenmeyer, P.L.S.
ASST. CITY ENGINEER
DATE 3-4-97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

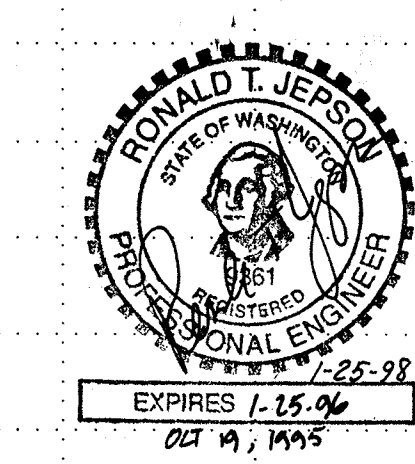
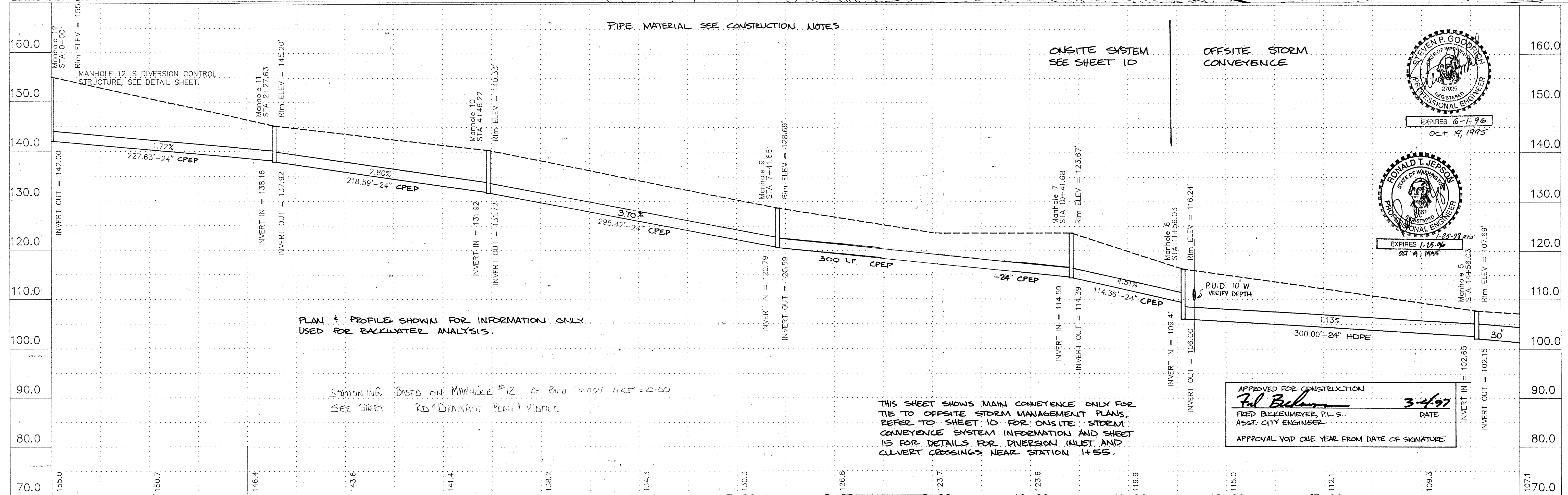


12-20
SUB 384
BLACKBURN RIDGE



SCALES:
1" = 50' HOR
1" = 10' VER

SEE THE ROAD & DRAINAGE ONSITE
PLAN & PROFILE FOR ONSITE DESIGN.



APPROVED FOR CONSTRUCTION
Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE 3-4-97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE	1"=50'
DRAWN BY	SPG
CHECKED BY	
APPROVED BY	
DATE	12/13/95

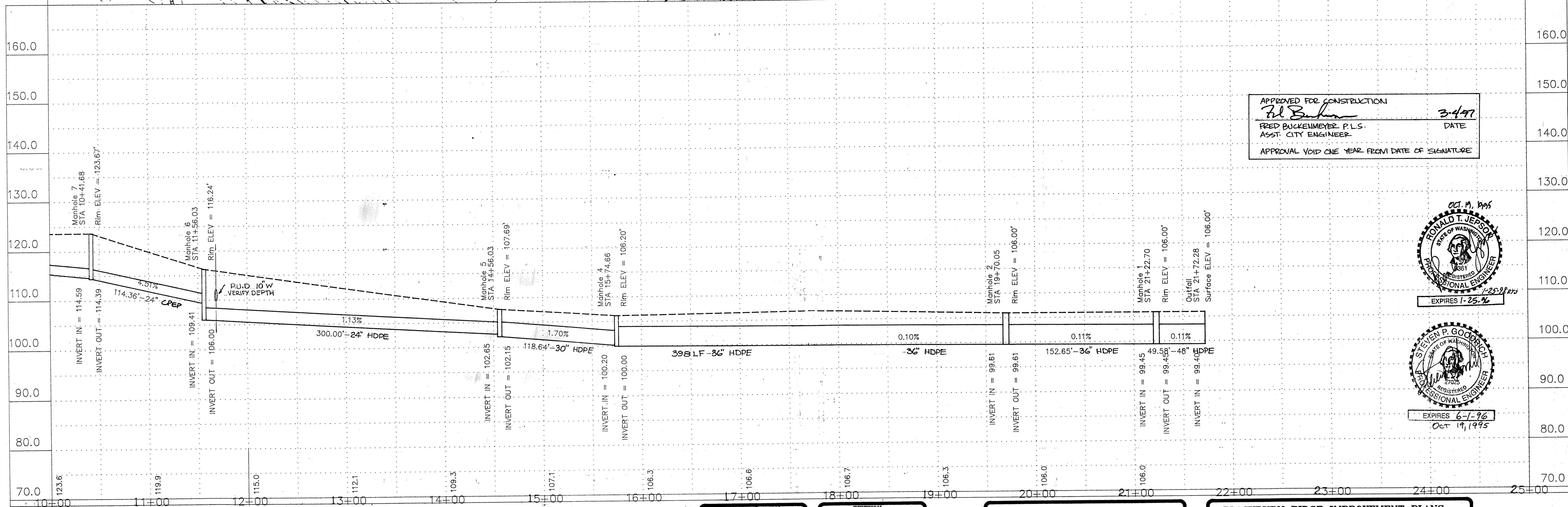
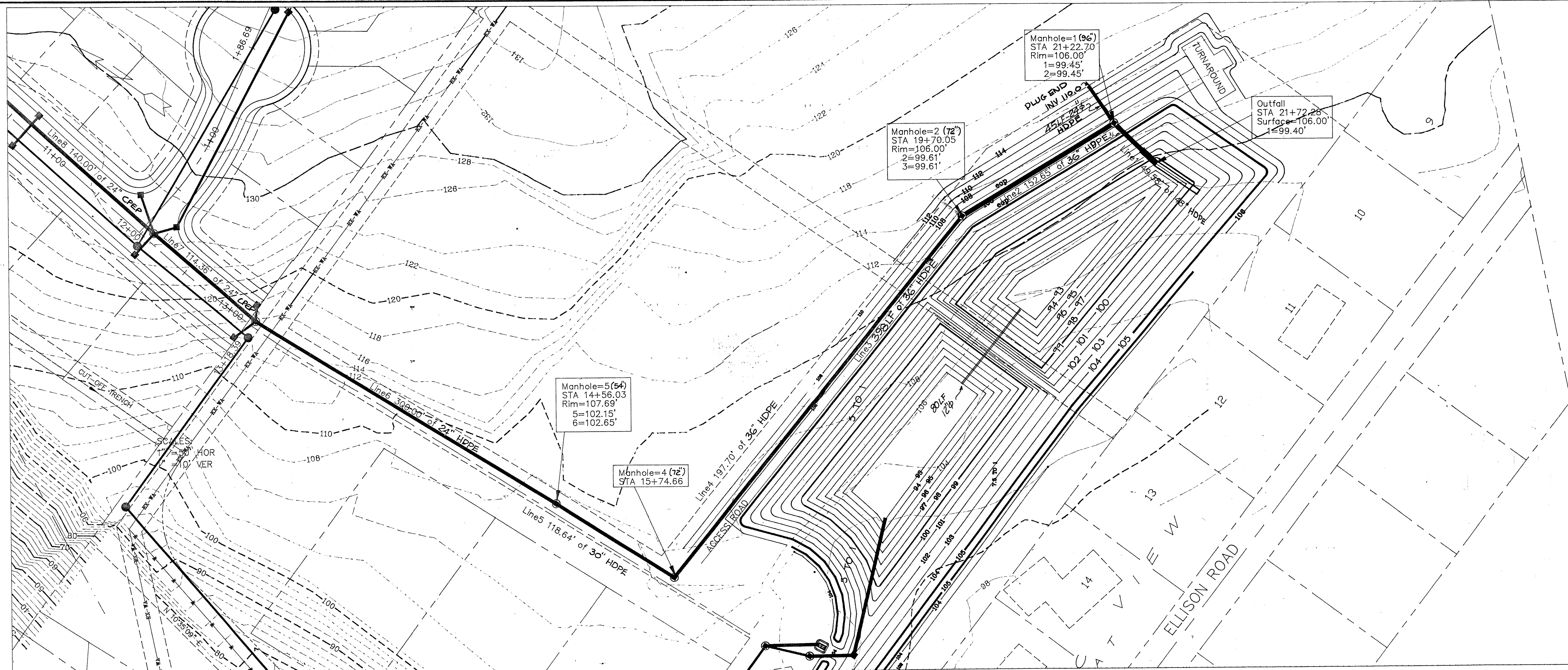
REVISION	
1	
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CLIENT:
BLACKBURN PROPERTIES
MT. VERNON

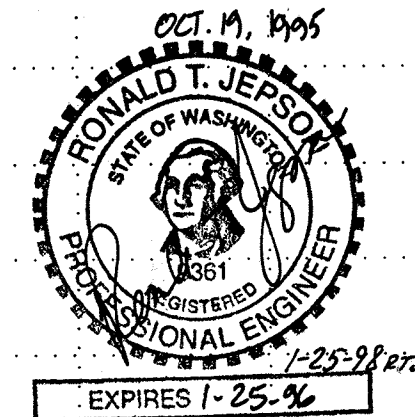
BLACKBURN RIDGE IMPROVEMENT PLANS
STORM CONVEYANCE SYSTEM
STATION 0+00 TO 14+56

12-20

13/20
STORM
BLACKBURN RIDGE



APPROVED FOR CONSTRUCTION
Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE 3-4-97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE



RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225

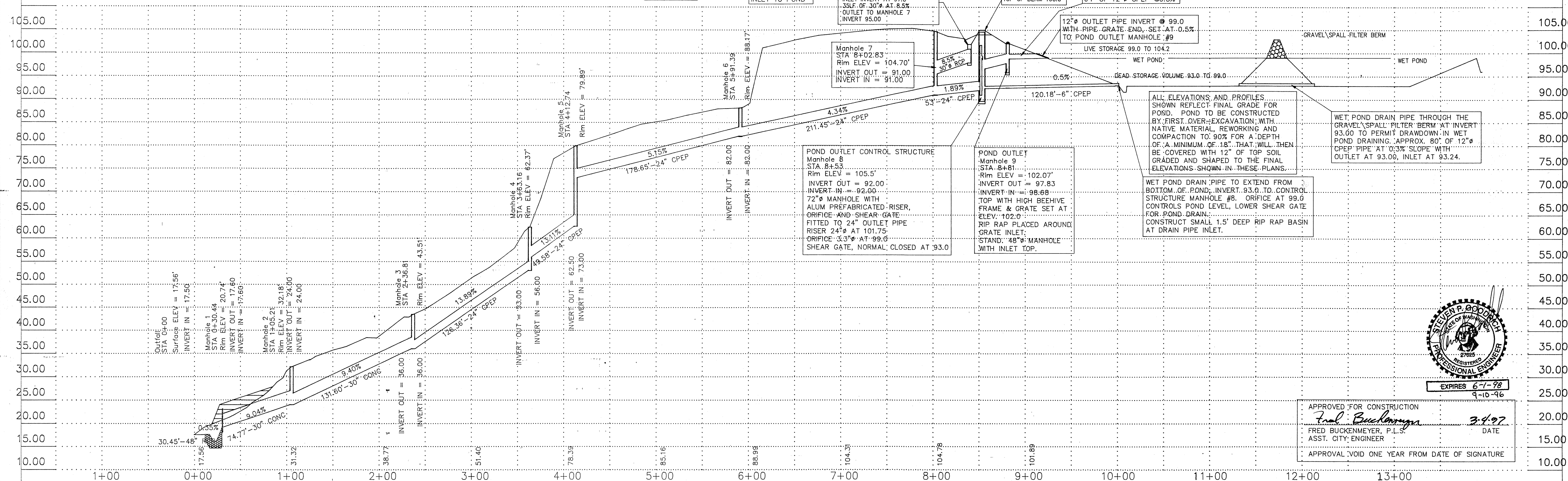
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CHECKED BY
APPROVED BY
DATE 8/13/95

REVISION
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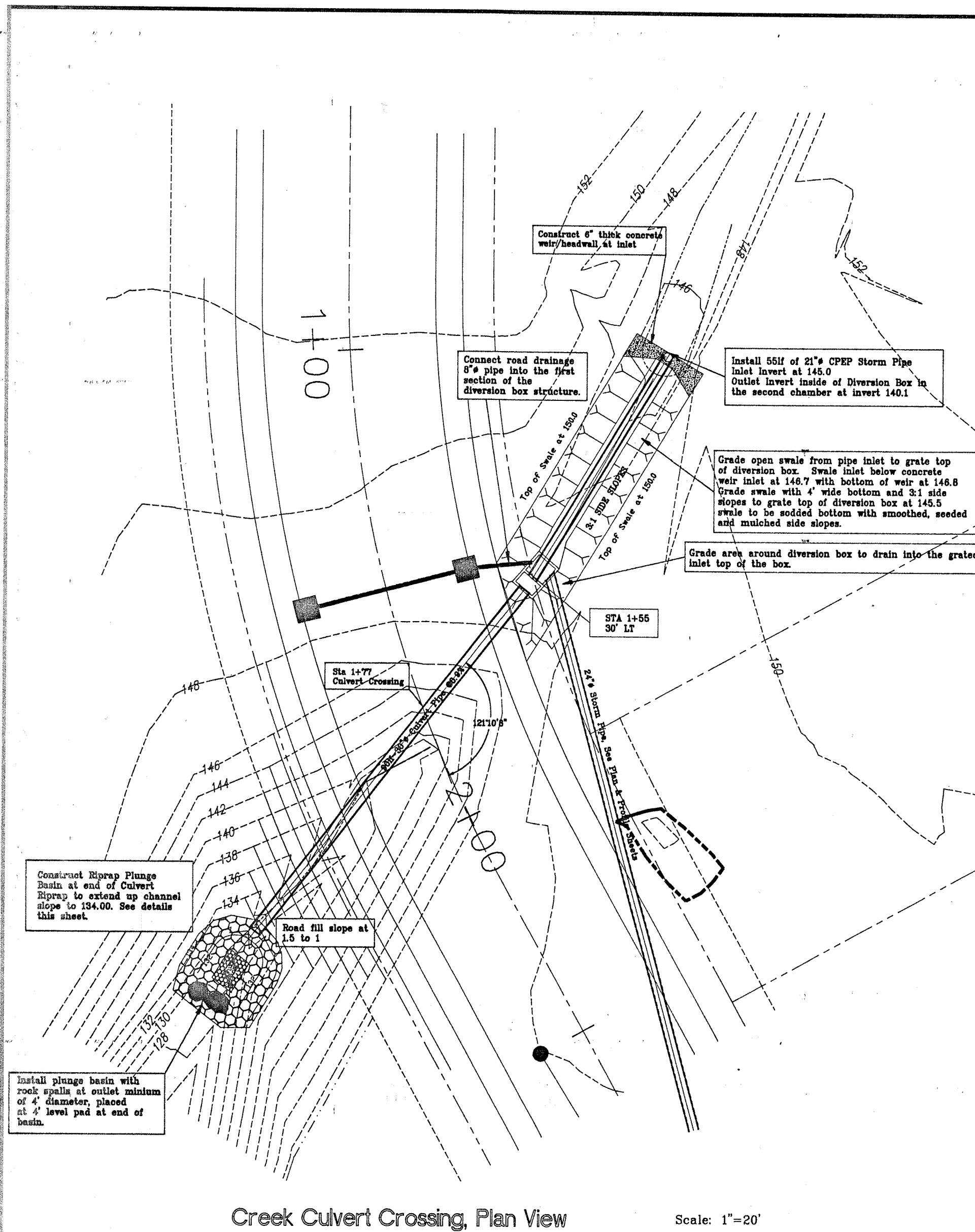
CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE IMPROVEMENT PLANS
STORM CONVEYANCE SYSTEM
STATION 14+56 TO 21+73

P.O. BOX 704
HOUGHTON, MI 49931
(906) 482-5733

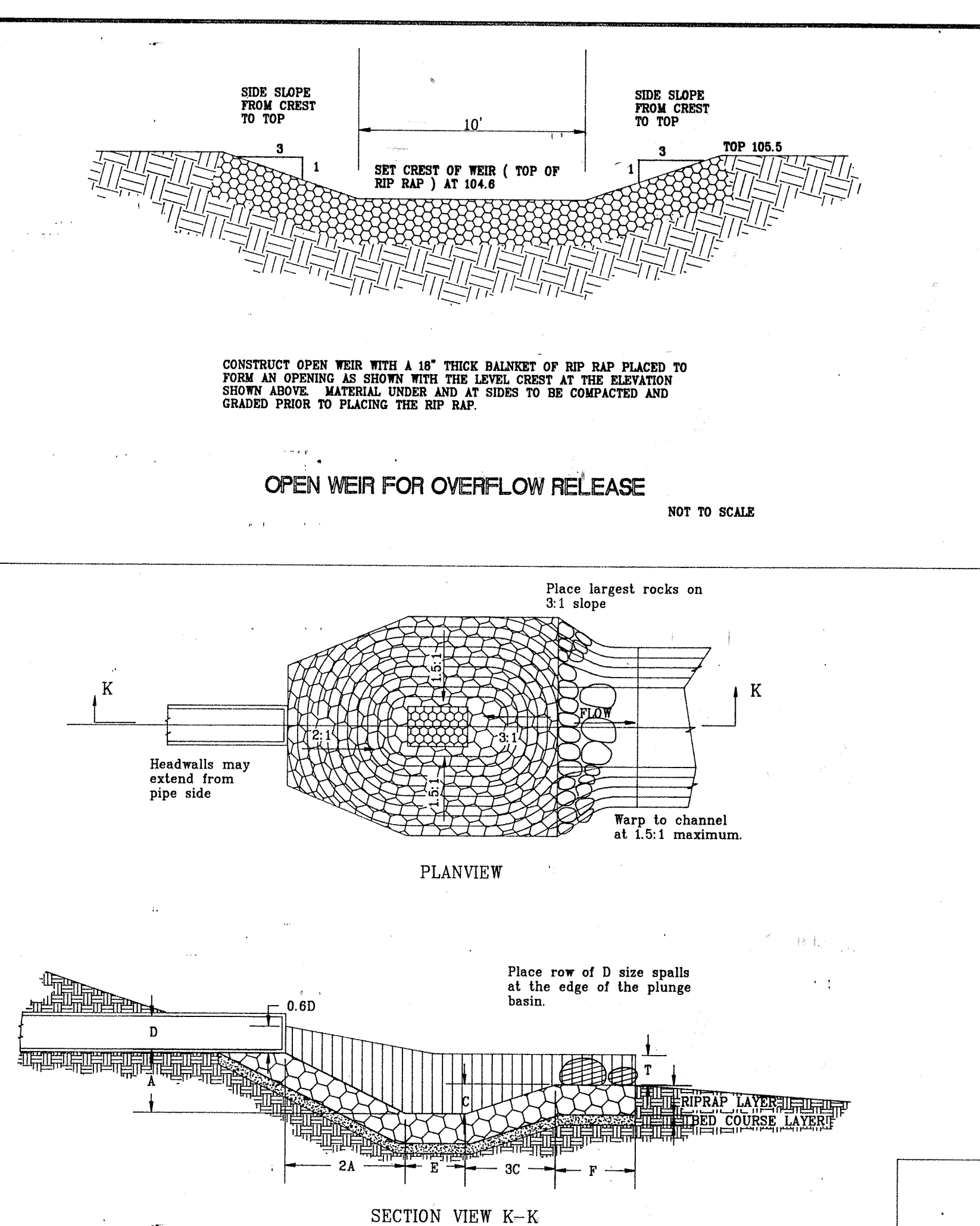


STORM WATER MGMT SUB 94-2 15/20
BLACKBURN RIDGE



Creek Culvert Crossing, Plan View

Scale: 1"=20'



OPEN WEIR FOR OVERFLOW RELEASE

NOT TO SCALE

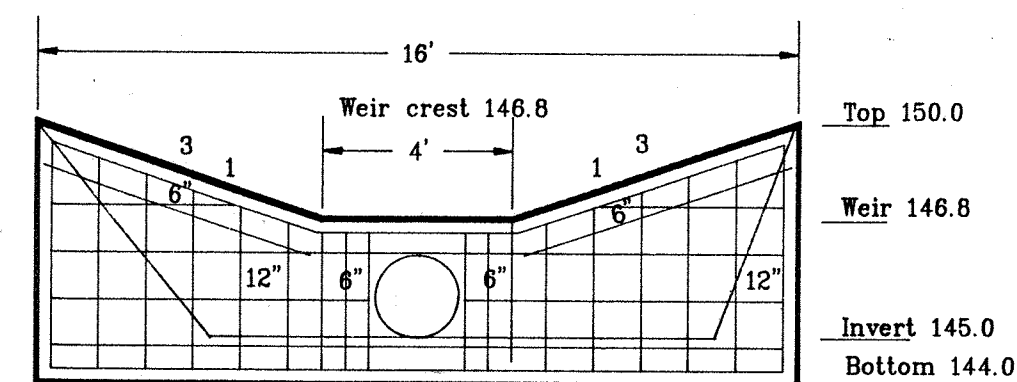
Pipe Basin Dimensions (feet)		Dia. V < 18 f.p.s.		(in.)		A		C		E		T		F	
24	1	1.5	3	1.5	4										
30	3	1.5	3	2	4										
36	3	1.5	3	2.5	4										

Riprap Size	16"
Riprap Thickness	18"
Bedding Thickness	8"

Plunge Basins are to be installed at the discharge of the Road Culvert of Station 1+77, see this sheet, the Pond Discharge shown on sheet 3 of the Storm Conveyance System and at the Pond inlet or outfall shown on sheet 2 of the Storm Conveyance System.

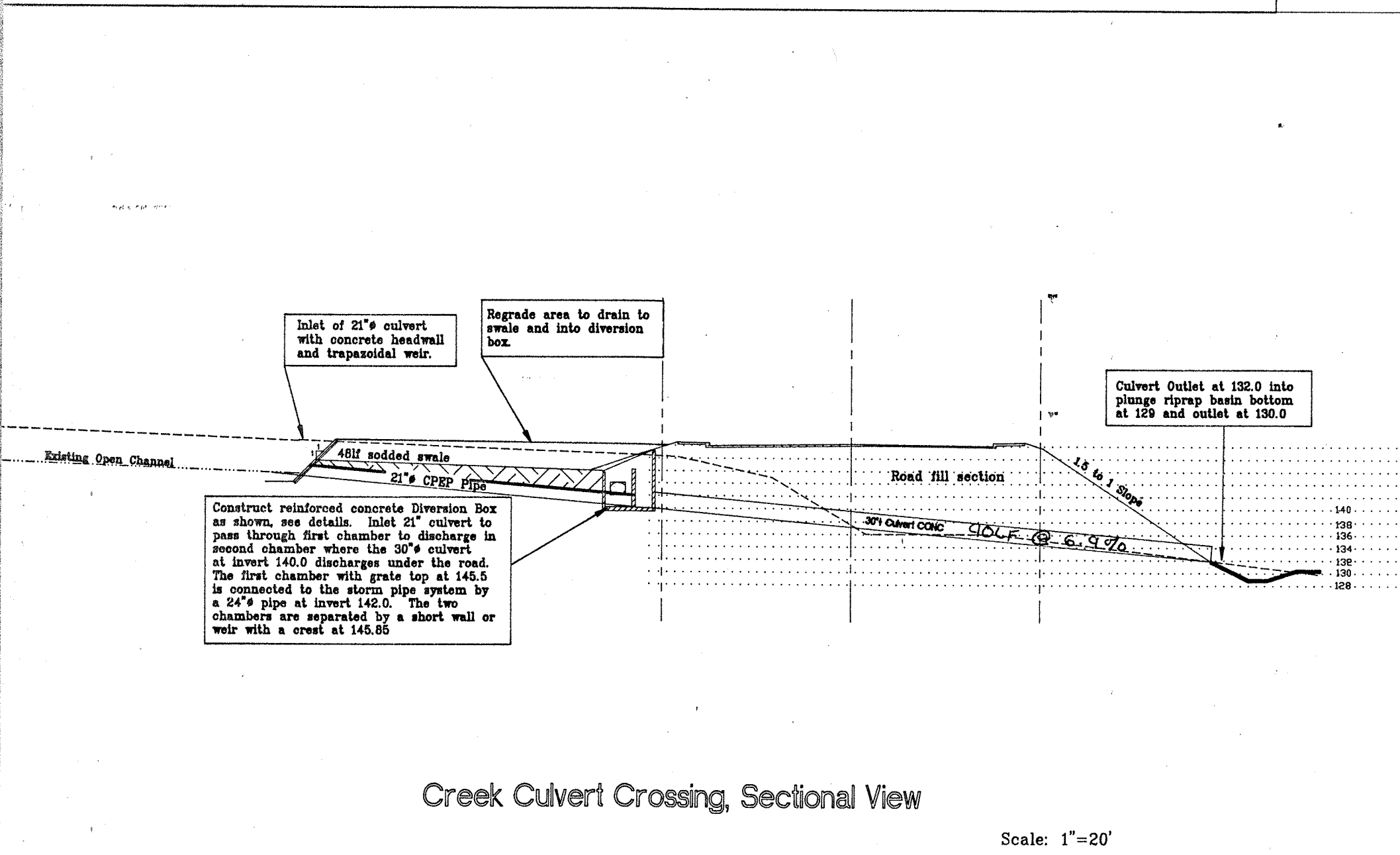
RIPRAP PLUNGE BASIN

NOT TO SCALE



Diversion Box Culvert & Swale Weir

Construct headwall 6" thick with #4 rebar placed 6" or 12" oc as shown. Install 21" pipe with anchor 6" long anchor bolts extending into wall. Face of wall to be at 1 to 1 slope forming a weir inlet to the swale extending west to the diversion box grate top. The weir crest is to be set 0.1' higher than the swale.



Creek Culvert Crossing, Sectional View

Scale: 1"=20'

steven p. goodrich, pe
CIVIL AND ENVIRONMENTAL ENGINEERING
P.O. BOX 704
HOUGHTON, MI 49931
(906) 482-5733

APPROVED FOR CONSTRUCTION
Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER
DATE 3-4-97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE

RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE VARIES
DRAWN BY SPG
CHECKED BY
APPROVED BY
DATE 8/16/95

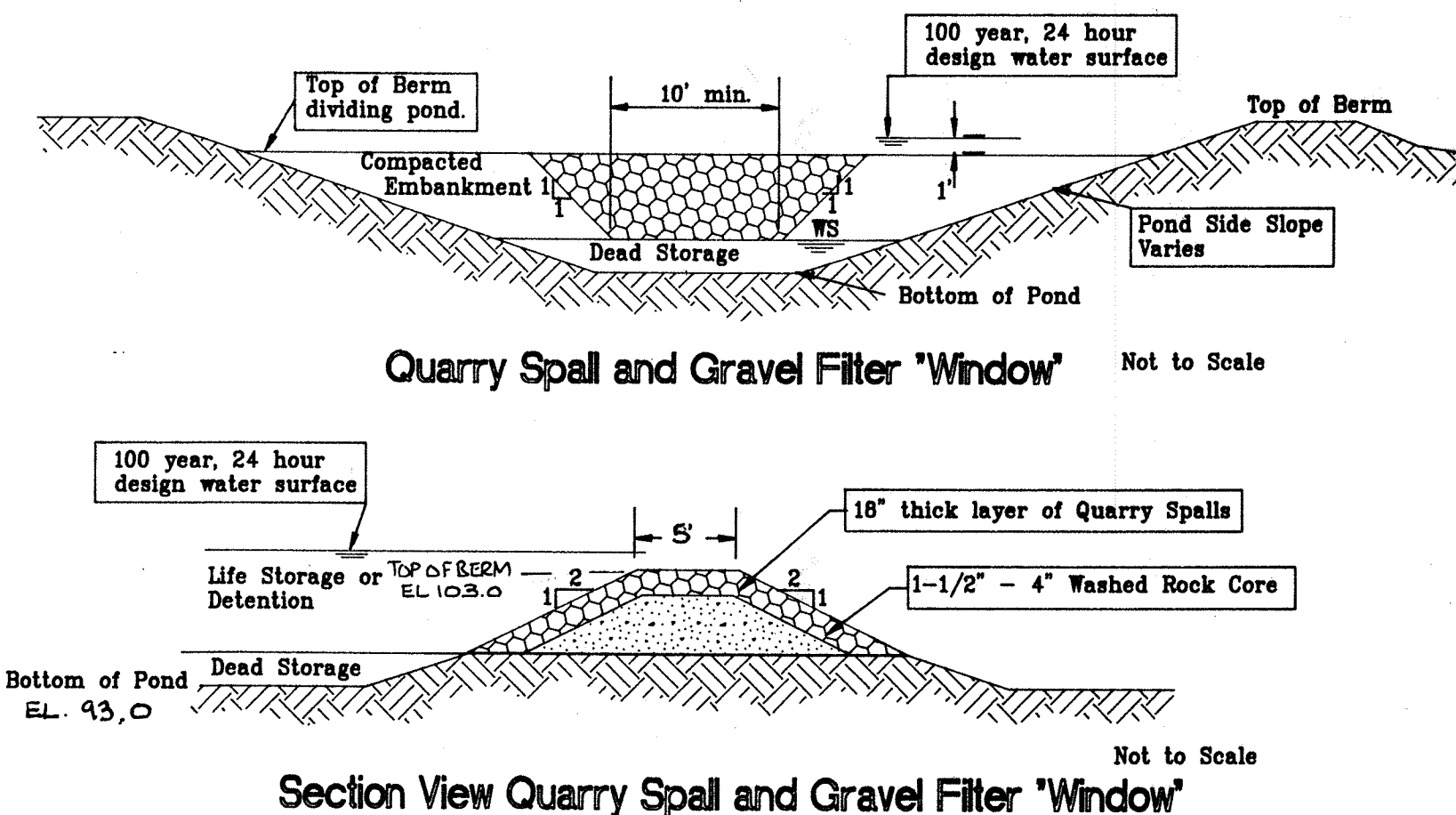
REVISION
8/30/96 S.P.G.
2
3

CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE IMPROVEMENT PLANS
STORM WATER MANAGEMENT PLANS
CREEK DIVERSION & DETAILS

RTJ-94111

15
20

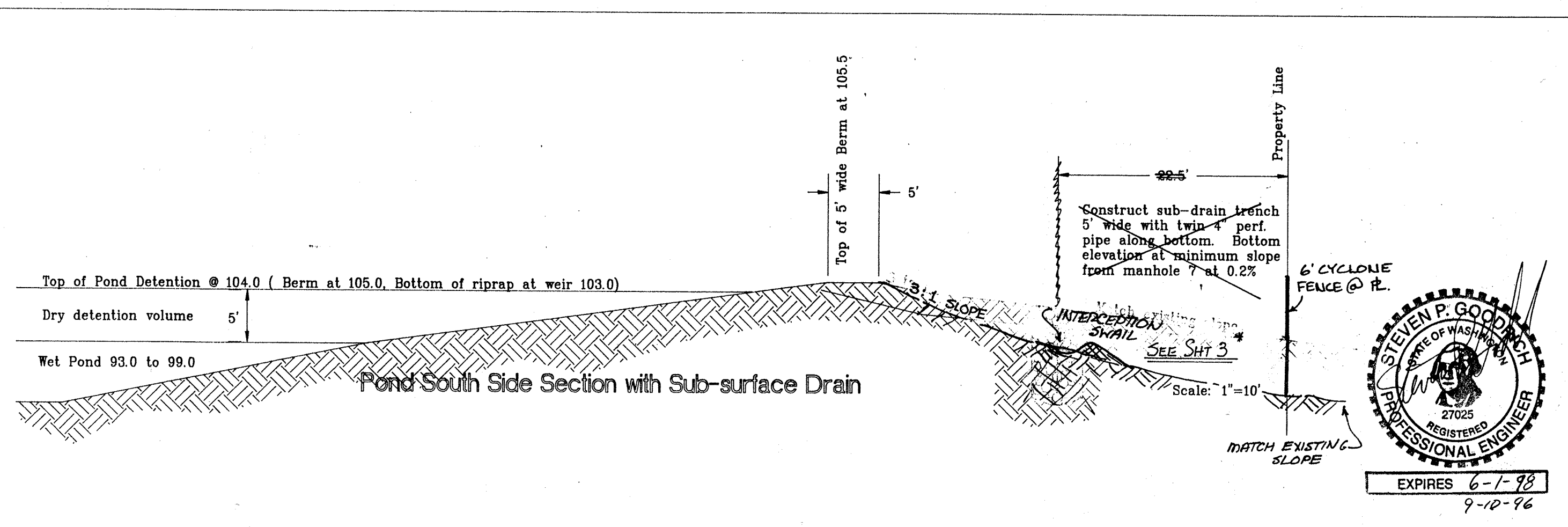


Quarry Spill and Gravel Filter "Window"

Not to Scale

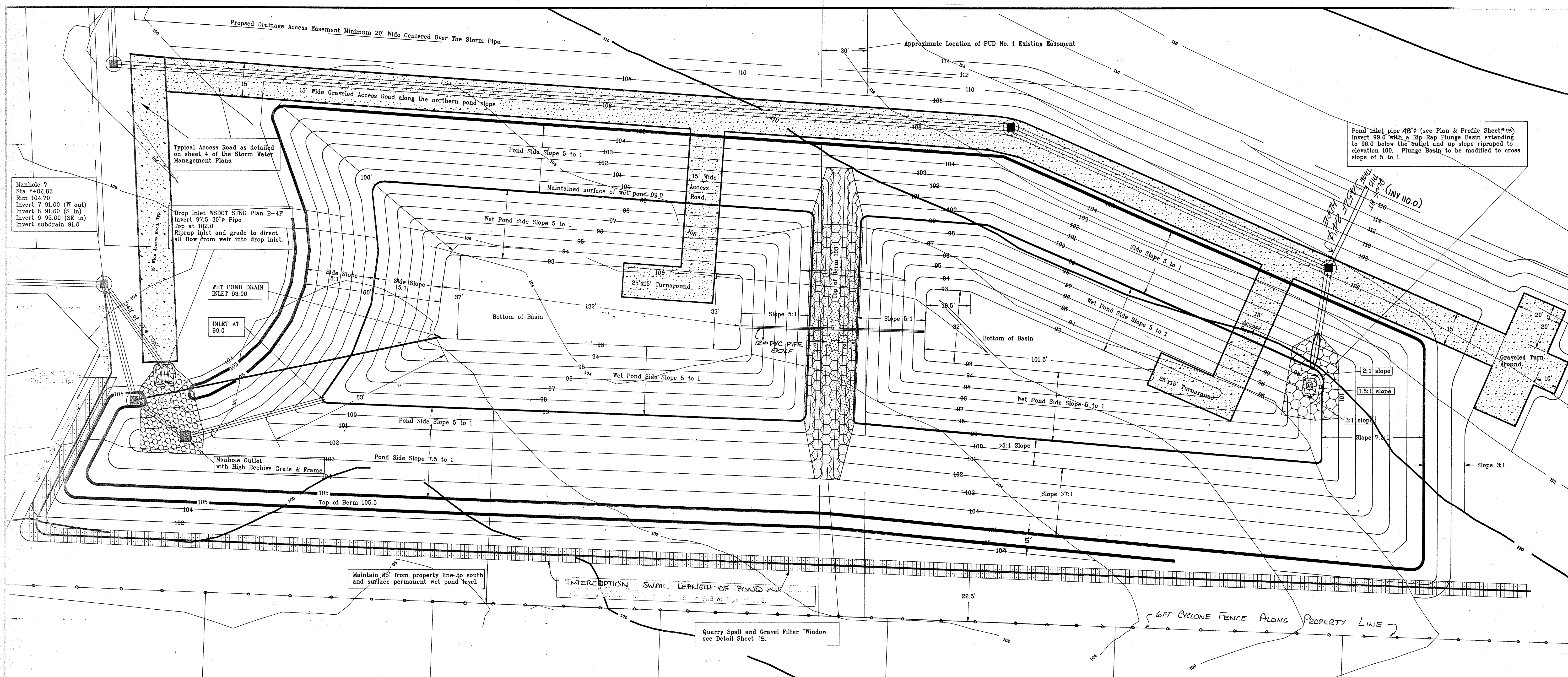
Section View Quarry Spill and Gravel Filter "Window"

Not to Scale

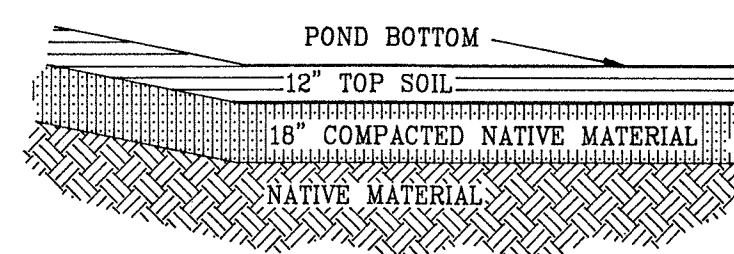


Pond South Side Section with Sub-surface Drain

STEVEN P. GOODRICH
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 6-1-98
9-10-96



BELOW THE FINISHED GRADE
SHOWN IN THESE PLANS THE
TYPICAL POND SECTION SHOULD
CONSIST OF 12" OF TOP SOIL, OVER
A MINIMUM 18" COMPACTED DEPTH
OF NATIVE MATERIAL OR OTHER
APPROVED SOIL SET ON THE
UNDISTURBED NATIVE SOIL.

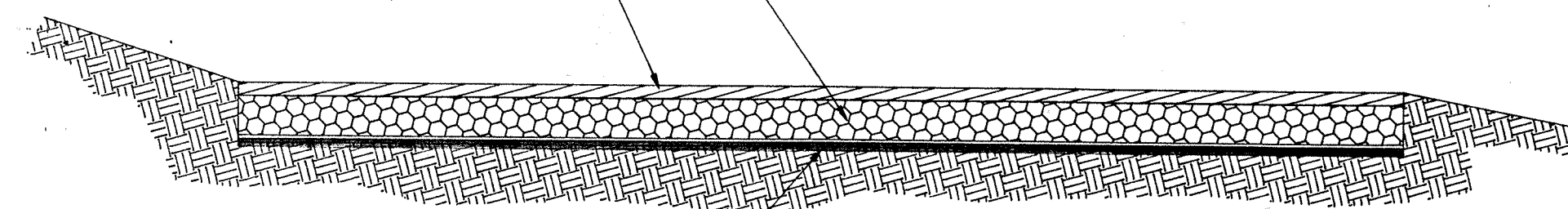


TYPICAL POND SECTION

NOT TO SCALE

8" Thick layer of quarry spalls
2" to 4" in size.

2" Crushed



Geotextile placed with 1.5' to 2' lap joints
non-woven Phillips Supac 4Np or equal or
woven 4 to 4.5 ounce per square yard.

TYPICAL ACCESS ROAD SECTION

Not to scale



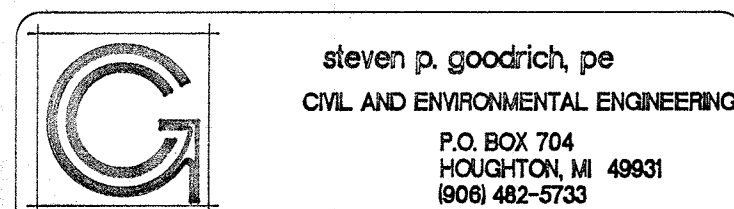
EXPIRES 6-1-98
9-10-96

APPROVED FOR CONSTRUCTION

Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
ASST. CITY ENGINEER

34.97
DATE

APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE



RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS 222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE	1"=20'
DRAWN BY	SPG
CHECKED BY	.
APPROVED BY	.
DATE	8/18/95

REVISION
8-31-96 S.P.G.
2
3

CLIENT:

BLACKBURN PROPERTIES, INC.
MT. VERNON, WASH.

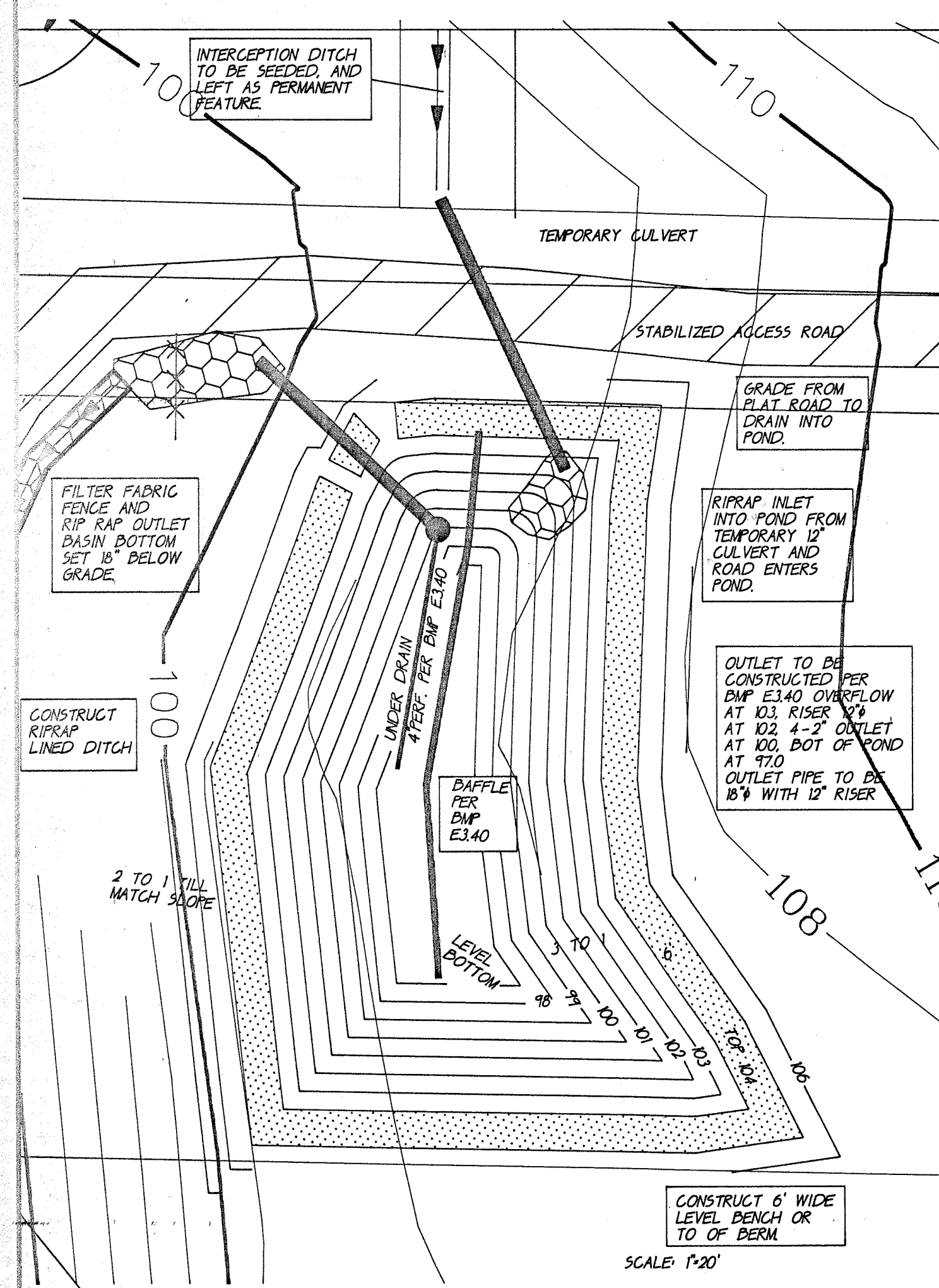
BLACKBURN RIDGE IMPROVEMENT PLANS/
STORM WATER MANAGEMENT PLANS
DETENTION POND

RTJ-94111

File name: D:\JOBS\941107\DRNPND01

TEMP. EROSION CONT. SUB94-2
BLACKBURN RIDGE

- For BMP's listed below refer Standard Document of Washington Department of Ecology, Stormwater Management Manual for the Puget Sound Basin (The Technical Manual) Volume II Erosion and Sediment Control, Chapter II-5: Standards and Specifications For Best Management Practices for Erosion And Sediment Control.
- PS BMP E1.35 Permanent Seeding and Planting
 - CE BMP E2.10 Stabilized Construction Entrance and Tire Wash
 - CRS BMP E2.15 Construction Road Stabilization
 - DS BMP E2.55 Interceptor Dike and Swale, See Details On TESC Sheet
 - OP BMP E2.70 Outlet Protection
 - RR BMP E2.75 Riprap
 - FF BMP E3.10 Filter Fence
 - STB BMP E3.15 Straw Bale Barrier
 - IP BMP E3.30 Storm Drain Inlet Protection, Install at each inlet grate.
 - SB BMP E3.40 Temporary Sediment Pond/Basin, See Details On TESC Sheet
 - Note SCC Stabilized Conveyance Channel, See Details On TESC Sheet
 - Note CUL Temporary Culvert, Install temporary culvert under the Construction Entrance a 12" diameter CMP or HDPE providing a minimum of 12" cover with the culvert invert matching the existing ditch line at outlet. At the outlet place riprap at the outlet downstream for 3' and on both sides of the roadside channel.
 - Note A Culvert Crossing, Diversion Structure & Conveyance System to Detention Pond, refer to the Storm Water Conveyance Plans for Details
 - Note B Storm Pipe Conveyance System Outfall, refer to the Storm Water Conveyance Plans for Details
 - Note C Creek Culvert, refer to the Storm Water Conveyance Plans for Details
 - Note D Storm Pipe Conveyance System from Pond to Outfall, refer to the Storm Water Conveyance Plans for Details
 - Note E Storm Water Detention & Retention Pond, refer to the Storm Water Conveyance Plans for Details



APPROVED FOR CONSTRUCTION
Fred Buckenmeyer 3-4-97
FRED BUCKENMEYER, P.L.S. DATE
ASST. CITY ENGINEER
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE



STEVEN P. GOODRICH, P.E.
CIVIL AND ENVIRONMENTAL ENGINEERING
P.O. BOX 704
HOUGHTON, WA 98031
360 482-5753

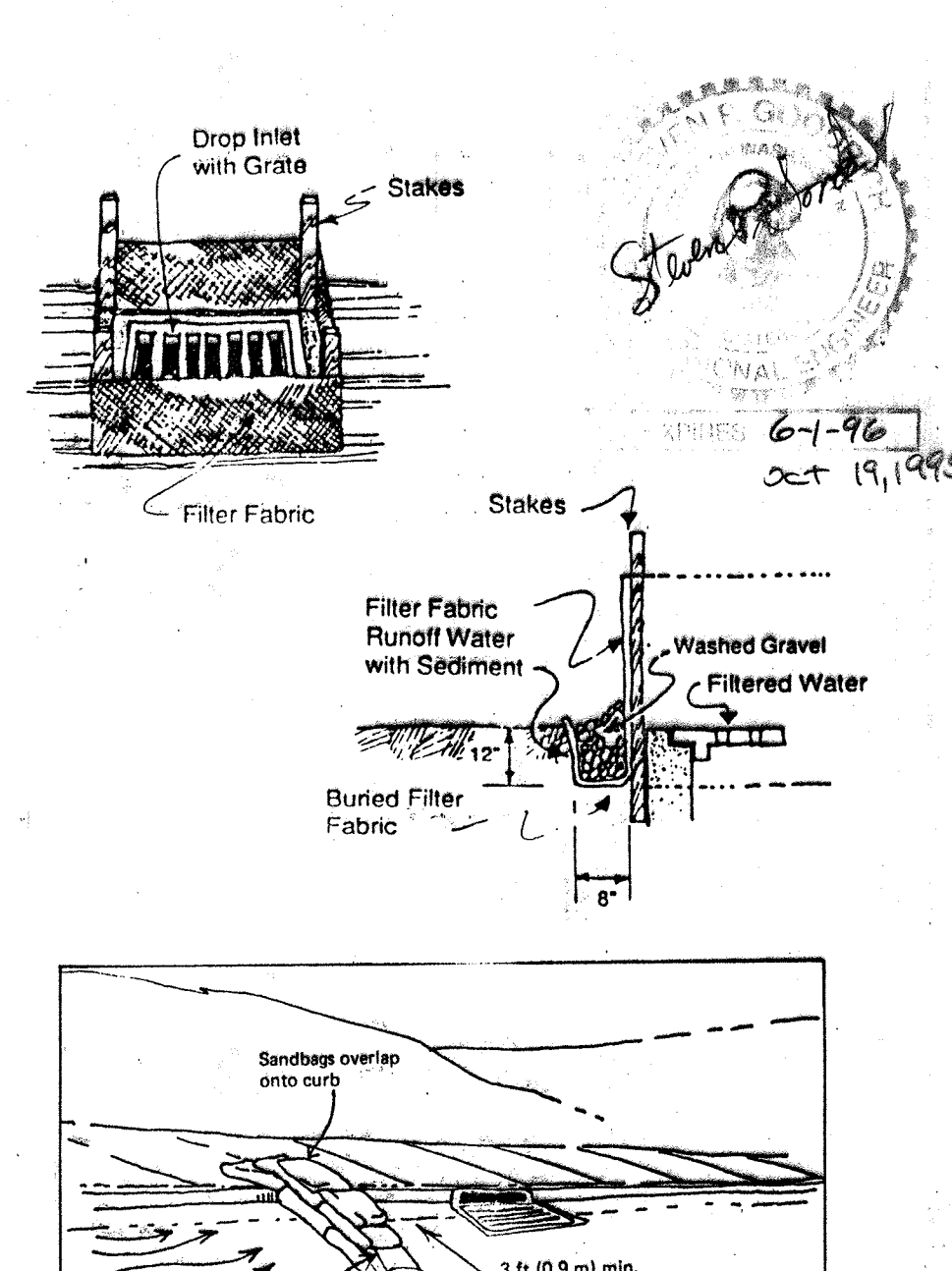
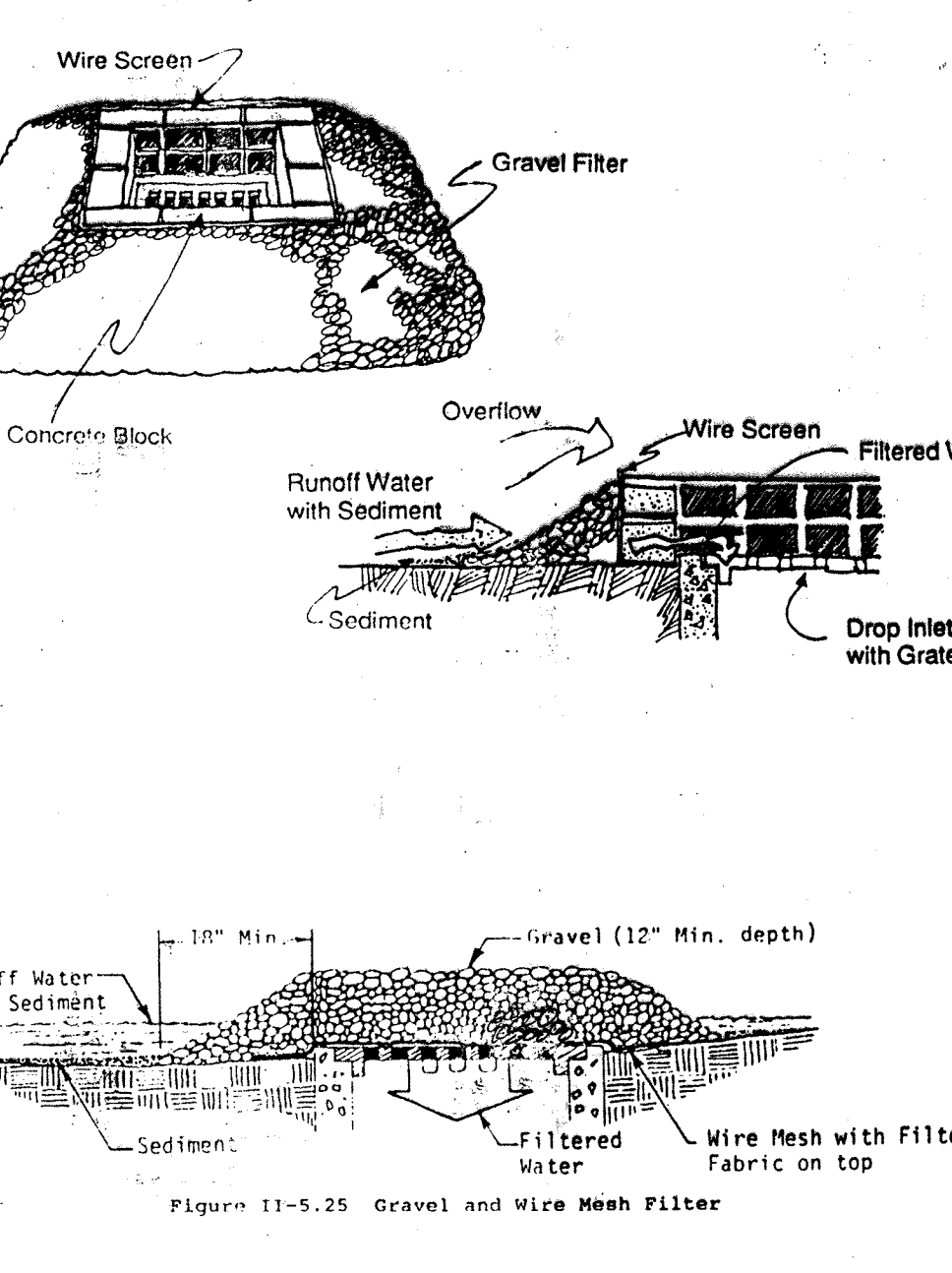
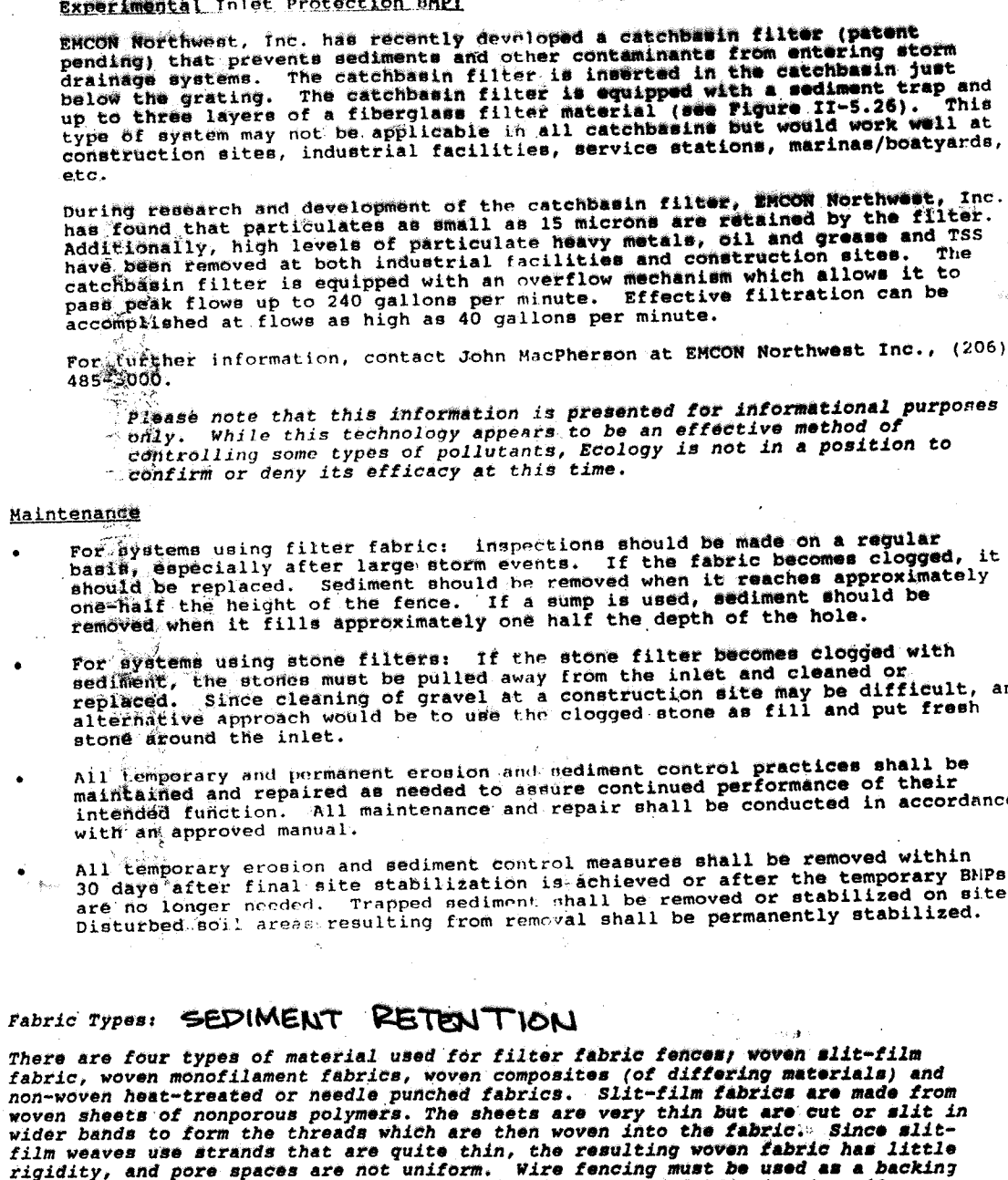
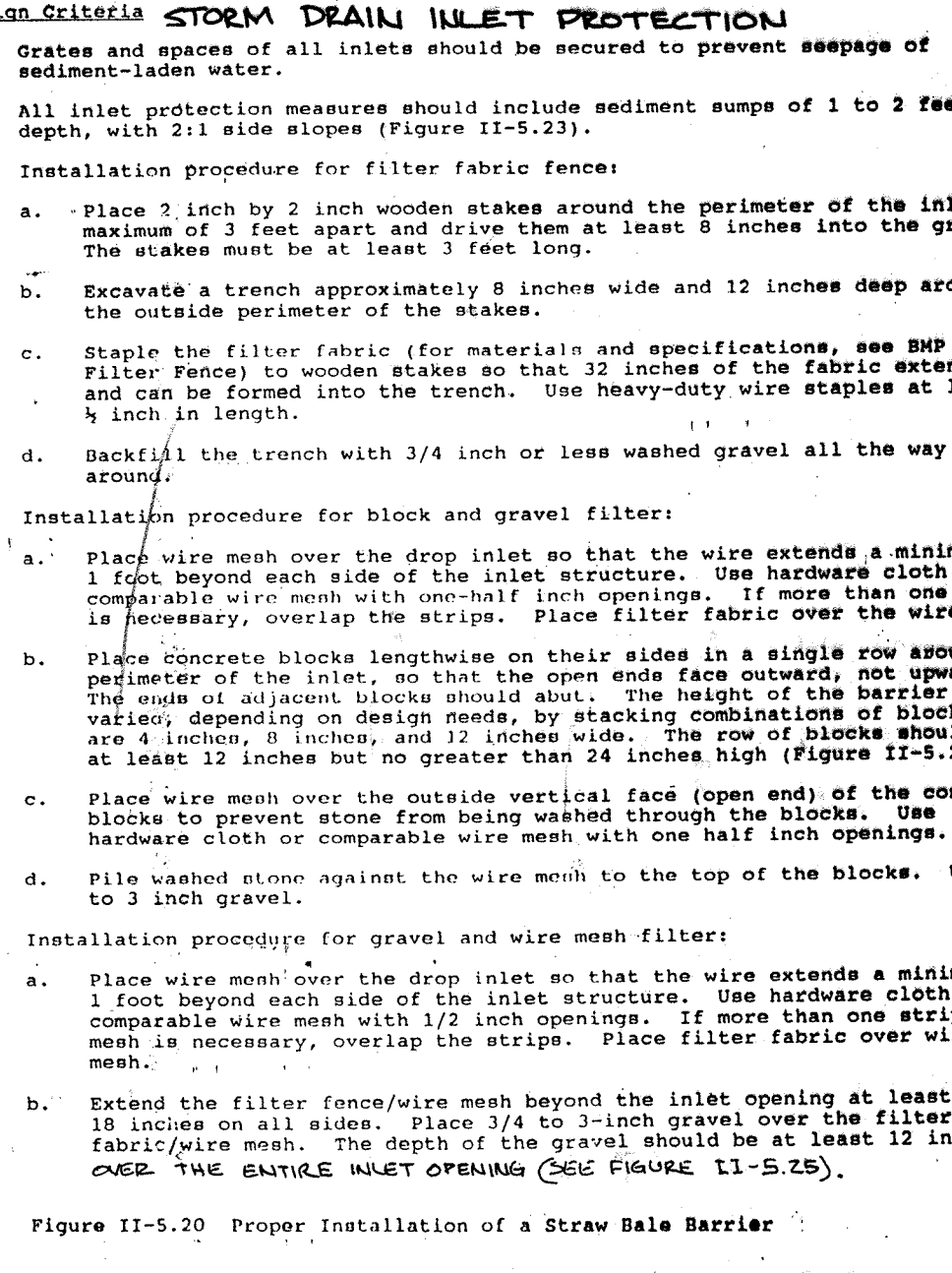
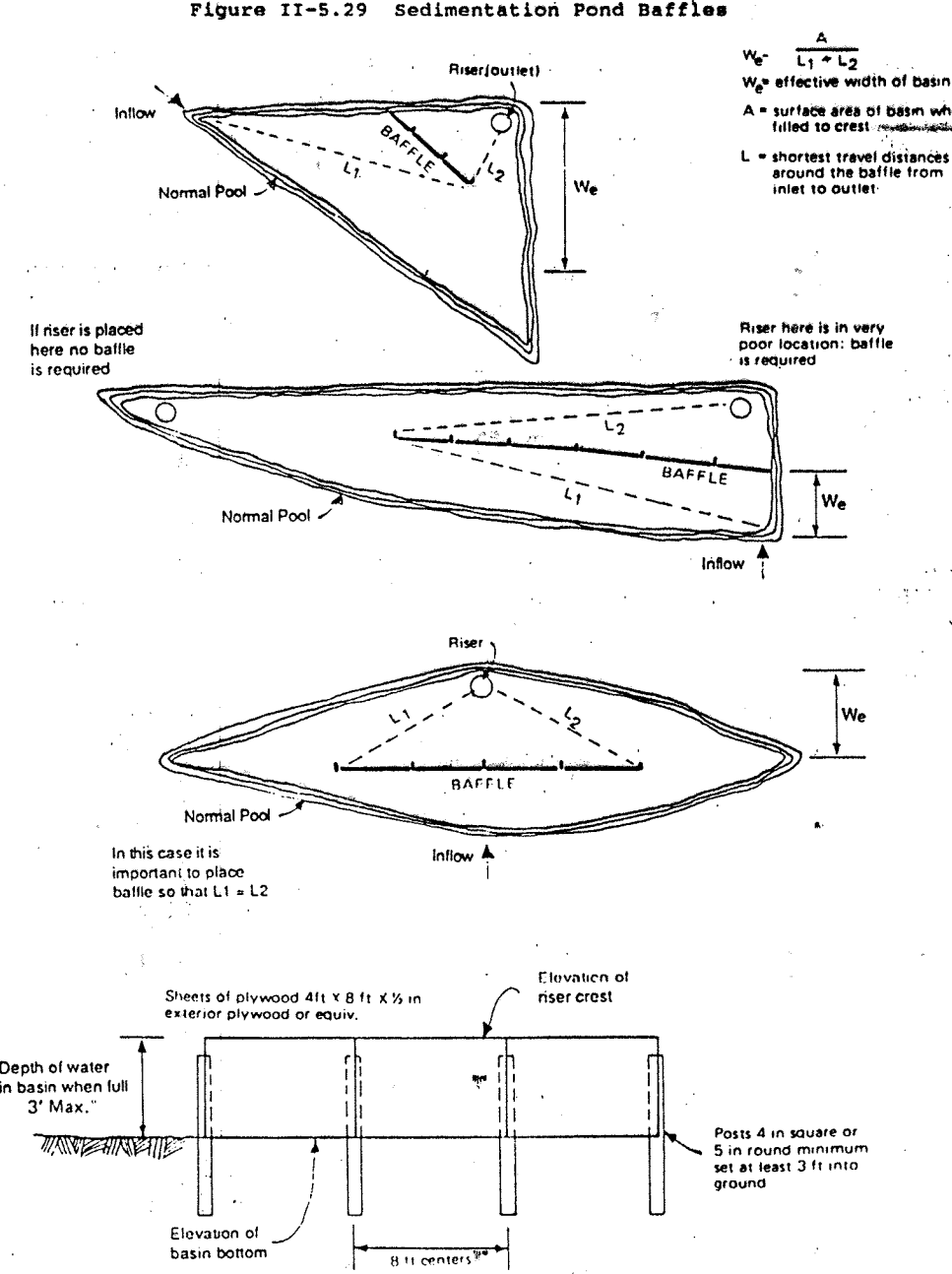
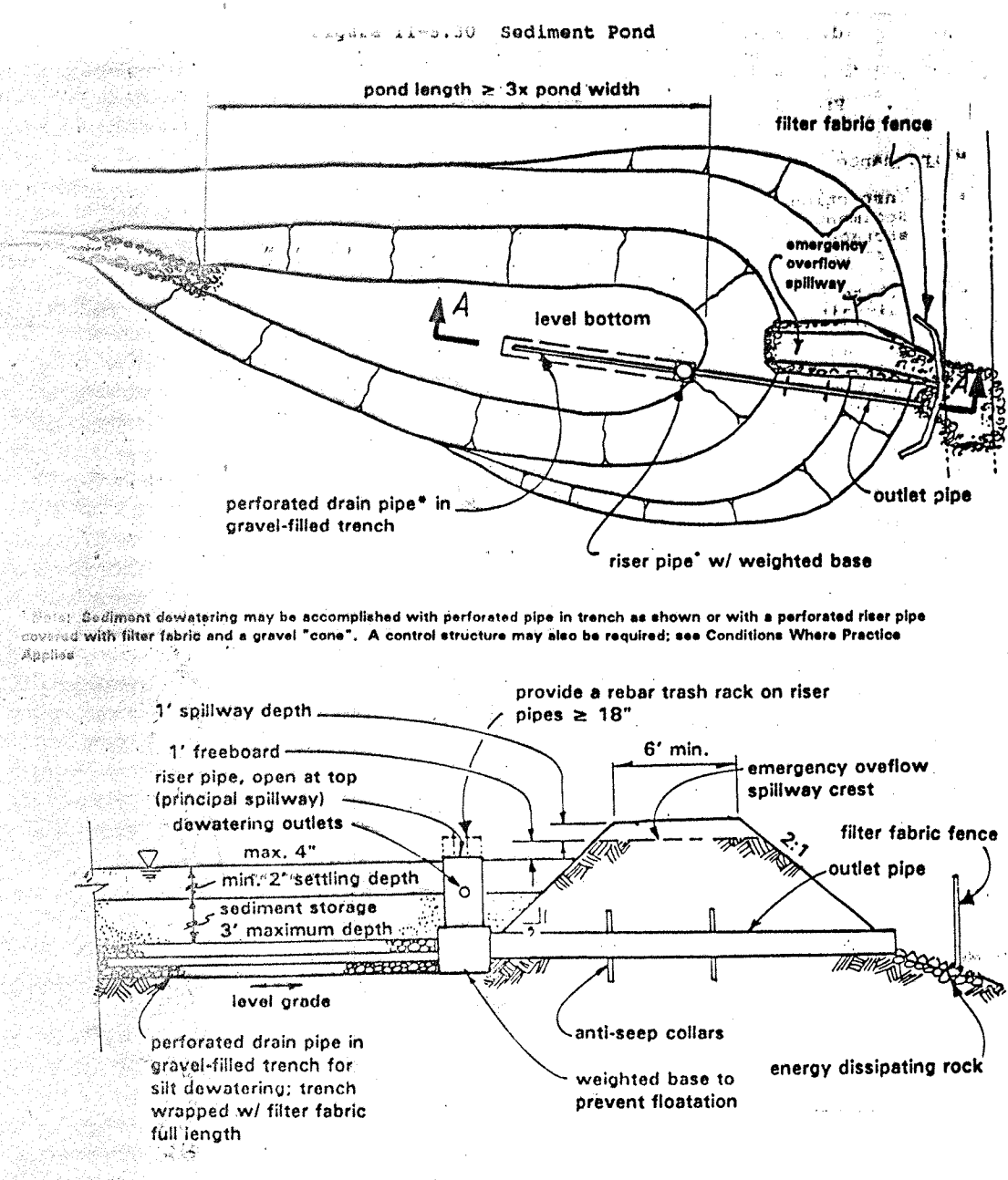
RONALD T. JEPSON & ASSOC.
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND, BELLINGHAM, WASHINGTON 98225

SCALE 1"=100'	REVISION
DRAWN BY SPG	8-27-96 SPG
CHECKED BY	2
APPROVED BY	3
DATE 9/4/96	

CLIENT:
BLACKBURN PROPERTIES, INC.
MT. VERNON, WASHINGTON

BLACKBURN RIDGE
IMPROVEMENT PLANS
TEMPORARY EROSION CONTROL PLAN

RTJ-94111
FILE NAME: D:\JOBS\94107\94110



DESIGN CRITERIA

STRAW BALE BARRIER

A formal design is not required.

Plant Application:

- Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another.
- All bales shall be either wire-bound or string-tied. Straw bales shall be installed so that binders are oriented along the sides rather than along the tops and bottoms of the bales in order to prevent deterioration of the binders (Figure II-5-19).
- The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. The trench shall be deep enough to remove all grass and other material which might allow underflow. After the bales are stacked and chinked (filled by wedging), the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier (Figure II-5-19).
- Each bale shall be securely anchored by at least 4 stakes or re-bars driven through the bale. The first stake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or re-bars shall be driven deep enough into the ground to securely anchor the bales. Stakes should not extend above the bales but instead should be driven in flush with the top of the bale for safety reasons.
- The gaps between the bales shall be chinked (filled by wedging) with straw to prevent water from seeping between the bales. Straw scattered over the area immediately uphill from a straw bale barrier tends to show barrier efficiency. Wedging must be done carefully in order not to separate the bales.
- Inspection shall be frequent and repair or replacement shall be made promptly as needed.
- Straw bale barriers shall be removed when they have served their usefulness, but not before the upslope area has been permanently stabilized.

Plant Application:

- Bales shall be placed in a single row, lengthwise, oriented perpendicular to the contour, with ends of adjacent bales tightly abutting one another.

Criteria

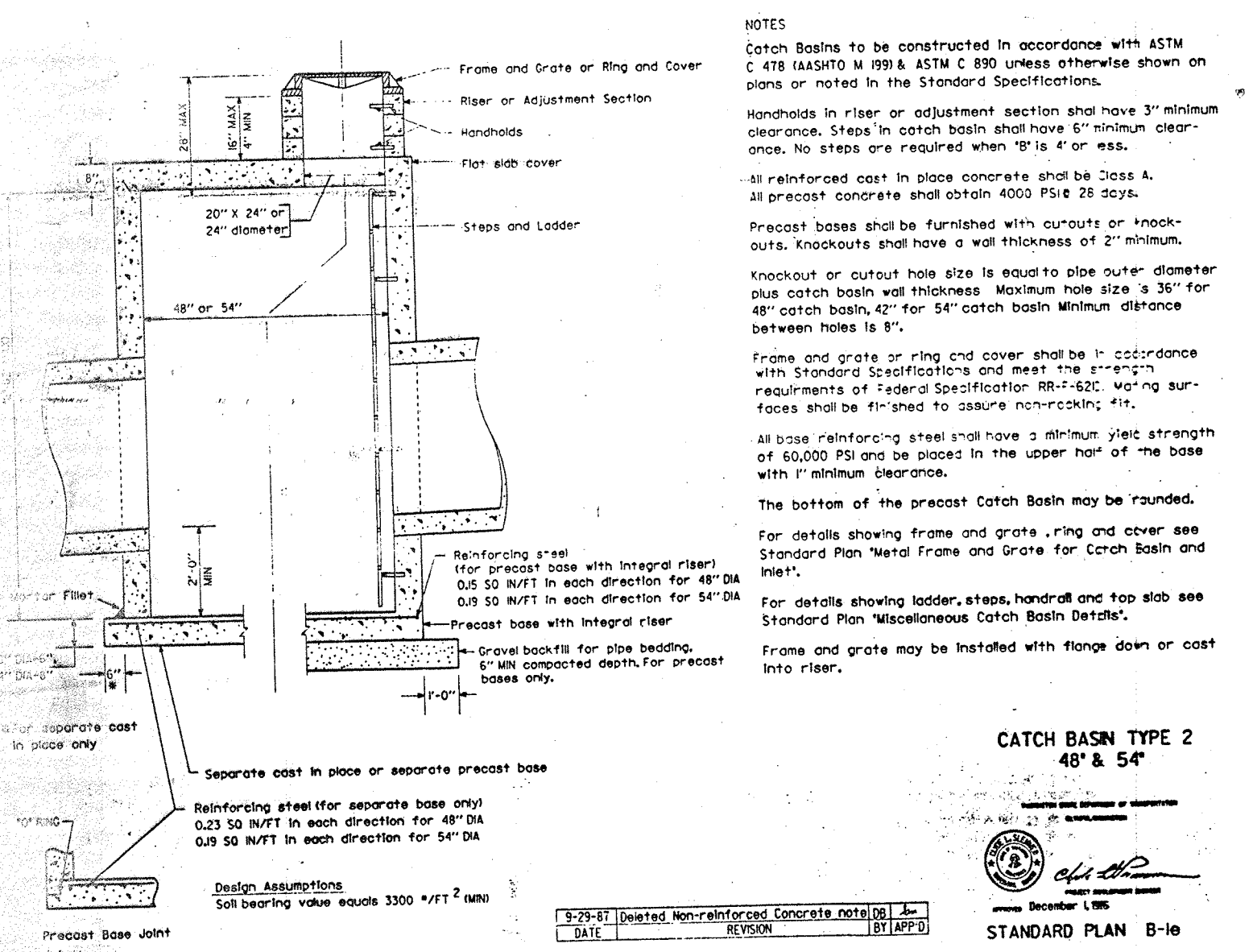
RIPRAP

Also see Table III-2-27, Rock Protection at Outfalls in the Runoff Control Volume.

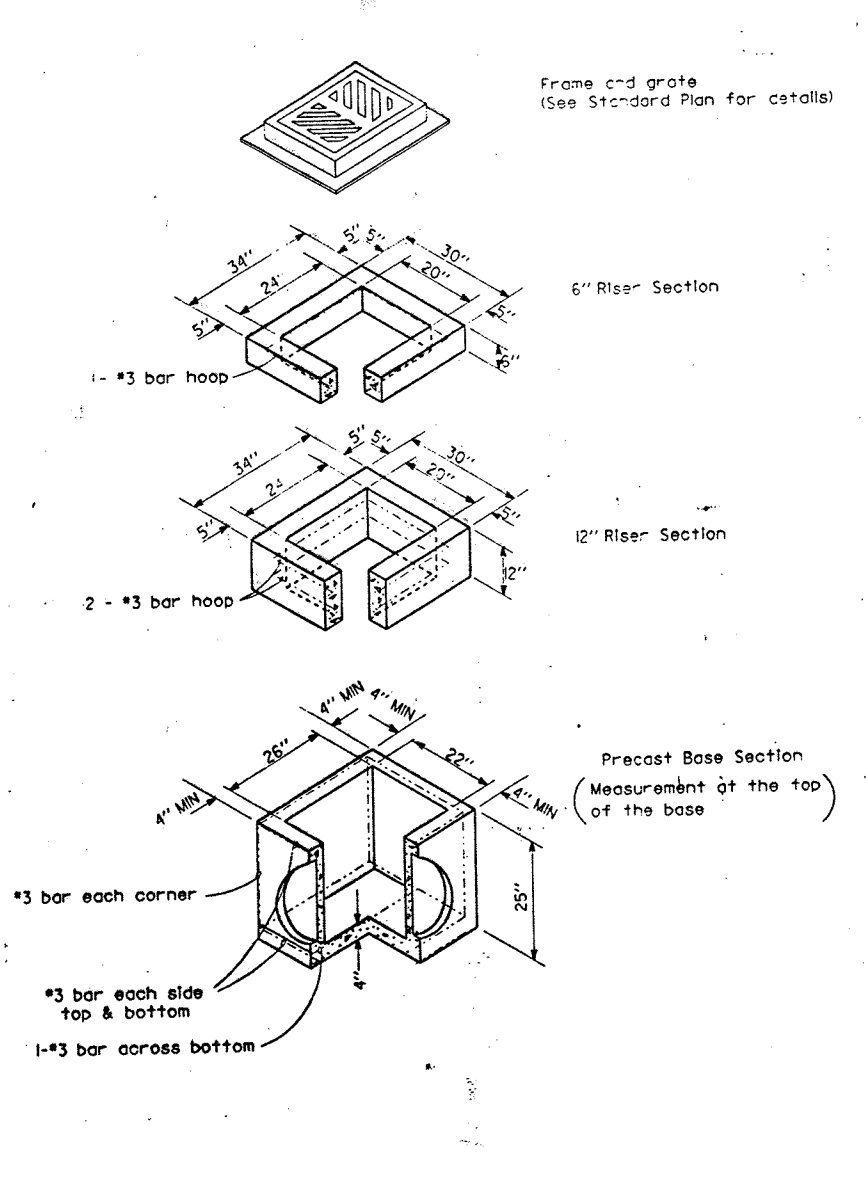
Table II-5-4 Size of Riprap Stones

Weight (lbs)	Mean Spherical Diameter (ft)	Rectangular Shape Length (ft)	Rectangular Shape Width (ft)	Rectangular Shape Height (ft)
50	0.8	1.4	0.5	0.5
100	1.1	1.8	0.6	0.6
200	1.3	2.2	0.7	0.7
300	1.6	2.6	0.9	0.9
400	1.8	3.0	1.0	1.0
500	2.0	3.4	1.1	1.1
600	2.2	3.7	1.2	1.2
700	2.4	4.0	1.3	1.3
800	2.6	4.4	1.4	1.4
900	2.8	4.8	1.5	1.5
1000	3.0	5.2	1.6	1.6
1200	3.4	6.0	1.8	1.8
1400	3.8	6.8	2.0	2.0
1600	4.2	7.6	2.2	2.2
1800	4.6	8.4	2.4	2.4
2000	5.0	9.2	2.6	2.6
2200	5.4	10.0	2.8	2.8
2400	5.8	10.8	3.0	3.0
2600	6.2	11.6	3.2	3.2
2800	6.6	12.4	3.4	3.4
3000	7.0	13.2	3.6	3.6
3200	7.4	14.0	3.8	3.8
3400	7.8	14.8	4.0	4.0
3600	8.2	15.6	4.2	4.2
3800	8.6	16.4	4.4	4.4
4000	9.0	17.2	4.6	4.6
4200	9.4	18.0	4.8	4.8
4400	9.8	18.8	5.0	5.0
4600	10.2	19.6	5.2	5.2
4800	10.6	20.4	5.4	5.4
5000	11.0	21.2	5.6	5.6
5200	11.4	22.0	5.8	5.8
5400	11.8	22.8	6.0	6.0
5600	12.2	23.6	6.2	6.2
5800	12.6	24.4	6.4	6.4
6000	13.0	25.2	6.6	6.6
6200	13.4	26.0	6.8	6.8
6400	13.8	26.8	7.0	7.0
6600	14.2	27.6	7.2	7.2
6800	14.6	28.4	7.4	7.4
7000	15.0	29.2	7.6	7.6
7200	15.4	30.0	7.8	7.8
7400	15.8	30.8	8.0	8.0
7600	16.2	31.6	8.2	8.2
7800	16.6	32.4	8.4	8.4
8000	17.0	33.2	8.6	8.6
8200	17.4	34.0	8.8	8.8
8400	17.8	34.8	9.0	9.0
8600	18.2	35.6	9.2	9.2
8800	18.6	36.4	9.4	9.4
9000	19.0	37.2	9.6	9.6
9200	19.4	38.0	9.8	9.8
9400	19.8	38.8	10.0	10.0
9600	20.2	39.6	10.2	10.2
9800	20.6	40.4	10.4	10.4
10000	21.0	41.2	10.6	10.6
10200	21.4	42.0	10.8	10.8
10400	21.8	42.8	11.0	11.0
10600	22.2	43.6	11.2	11.2
10800	22.6	44.4	11.4	11.4
11000	23.0	45.2	11.6	11.6
11200	23.4	46.0	11.8	11.8
11400	23.8	46.8	12.0	12.0
11600	24.2	47.6	12.2	12.2
11800	24.6	48.4	12.4	12.4
12000	25.0	49.2	12.6	12.6
12200	25.4	50.0	12.8	12.8
12400	25.8	50.8	13.0	13.0
12600	26.2	51.6	13.2	13.2
12800	26.6	52.4	13.4	13.4
13000	27.0	53.2	13.6	13.6
13200	27.4	54.0	13.8	13.8
13400	27.8	54.8	14.0	14.0
13600	28.2	55.6	14.2	14.2
13800	28.6	56.4	14.4	14.4
14000	29.0	57.2	14.6	14.6
14200	29.4	58.0	14.8	14.8
14400	29.8	58.8	15.0	15.0
14600	30.2	59.6	15.2	15.2
14800	30.6	60.4	15.4	15.4
15000	31.0	61.2	15.6	15.6
15200	31.4	62.0	15.8	15.8
15400	31.8	62.8	16.0	16.0
15600	32.2	63.6	16.2	16.2
15800	32.6	64.4	16.4	16.4
16000	33.0	65.2	16.6	16.6
16200	33.4	66.0	16.8	16.8
16400	33.8	66.8	17.0	17.0
16600	34.2	67.6	17.2	17.2
16800	34.6	68.4	17.4	17.4
17000	35.0	69.2	17.6	17.6
17200	35.4	70.0	17.8	17.8
17400	35.8	70.8	18.0	18.0
17600	36.2	71.6	18.2	18.2
17800	36.6	72.4	18.4	18.4
18000	37.0	73.2	18.6	18.6
18200	37.4	74.0	18.8	18.8
18400	37.8	74.8	19.0	19.0
18600	38.2	75.6	19.2	19.2
18800	38.6	76.4	19.4	19.4
19000	39.0	77.2	19.6	19.6
19200	39.4	78.0	19.8	19.8
19400	39.8	78.8	20.0	20.0
19600	40.2	79.6	20.2	20.2
19800	40.6	80.4	20.4	20.4
20000	41.0	81.2	20.6	20.6
20200	41.4	82.0	20.8	20.8
20400	41.8	82.8	21.0	21.0
20600	42.2	83.6	21.2	21.2
20800	42.6	84.4	21.4	21.4
21000	43.0	85.2	21.6	21.6
21200	43.4	86.0	21.8	21.8
21400	43.8	86.8	22.0	22.0
21600	44.2	87.6	22.2	22.2
21800	44.6	88.4	22.4	22.4
22000	45.0	89.2	22.6	22.6
22200	45.4	90.0	22.8	22.8
22400	45.8	90.8	23.0	23.0
22600	46.2	91.6	23.2	23.2
22800	46.6	92.4	23.4	23.4
23000	47.0	93.2	23.6	23.6
23200	47.4	94.0	23.8	23.8
23400	47.8	94.8	24.0	24.0
23600	48.2	95.6	24.2	24.2
23800	48.6	96.4	24.4	24.4
24000	49.0	97.2	24.6	24.6
24200	49.4	98.0	24.8	24.8
24400	49.8	98.8	25.0	25.0
24600	50.2	99.6	25.2	25.2
24800	50.6	100.4	25.4	25.4
25000	51.0	101.2	25.6	25.6
25200	51.4	102.0	25.8	25.8
25400	51.8	102.8	26.0	26.0
25600	52.2	103.6	26.2	26.2
25800	52.6	104.4	26.4	26.4
26000	53.0	105.2	26.6	26.6
26200	53.4	106.0	26.8	26.8
26400	53.8	106.8	27.0	27.0
26600	54.2	107.6	27.2	27.2
26800	54.6	108.4	27.4	27.4
27000	55.0	109.2	27.6	27.6
27200	55.4	110.0	27.8	27.8
27400	55.8	110.8	28.0	28.0
27600	56.2	111.6	28.2	28.2
27800	56.6	112.4	28.4	28.4
28000	57.0	113.2	28.6	28.6
28200	57.4	114.0	28.8	28.8
28400	57.8	114.8	29.0	29.0
28600	58.2	115.6	29.2	29.2
28800	58.6	116.4	29.4	29.4
29000	59.0	117.2	29.6	29.6
29200	59.4	118.0	29.8	29.8
29400	59.8	118.8	30.0	30.0
29600	60.2	119.6	30.2	30.2
29800	60.6	120.4	30.4	30.4
30000	61.0	121.2	30.6	30.6
30200	61.4	122.0	30.8	30.8
30400	61.8	122.8	31.0	31.0
30600	62.2	123.6	31.2	31.2
30800	62.6	124.4	31.4	31.4
31000	63.0	125.2	31.6	31.6
31200	63.4	126.0	31.8	31.8
31400	63.8	126.8	32.0	32.0
31600	64.2	127.6	32.2	32.2
31800	64.6	128.4	32.4	32.4
32000	65.0	129.2	32.6	32.6
32200	65.4	130.0	32.8	32.8
32400	65.8	130.8	33.0	33.0
32600	66.2	131.6	33.2	33.2
32800	66.6	132.4	33.4	33.4
33000	67.0	133.2	33.6	33.6
33200	67.4	134.0	33.8	33.8
33400	67.8	134.8	34.0	34.0
33600	68.2	135.6	34.2	34.2
33800	68.6	136.4	34.4	34.4
34000	69.0	137.2	34.6	34.6
34200	69.4	138.0	34.8	34.8
34400	69.8	138.8	35.0	35.0
34600	70.2	139.6	35.2	35.2
34800	70.6	140.4	35.4	35.4
35000	71.0	141.2	35.6	35.6
35200	71.4	142.0	35.8	35.8
35400	71.8	142.8	36.0	36.0
35600	72.2	143.6	36.2	36.2

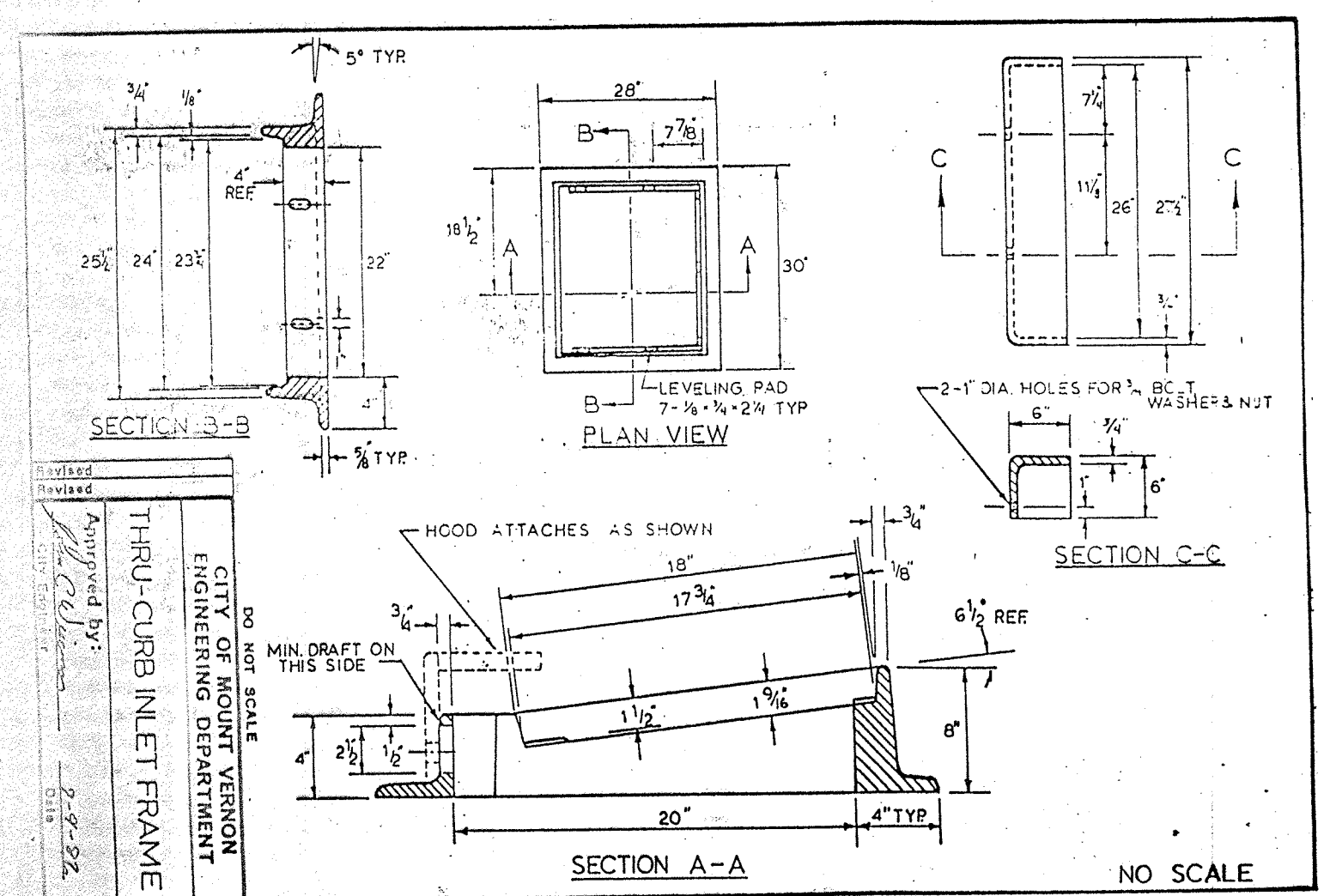
DETAILS SUB 94-2
BLACKBURN RIDGE



CATCH BASIN TYPE 2
48" x 54"
STANDARD PLAN B-16

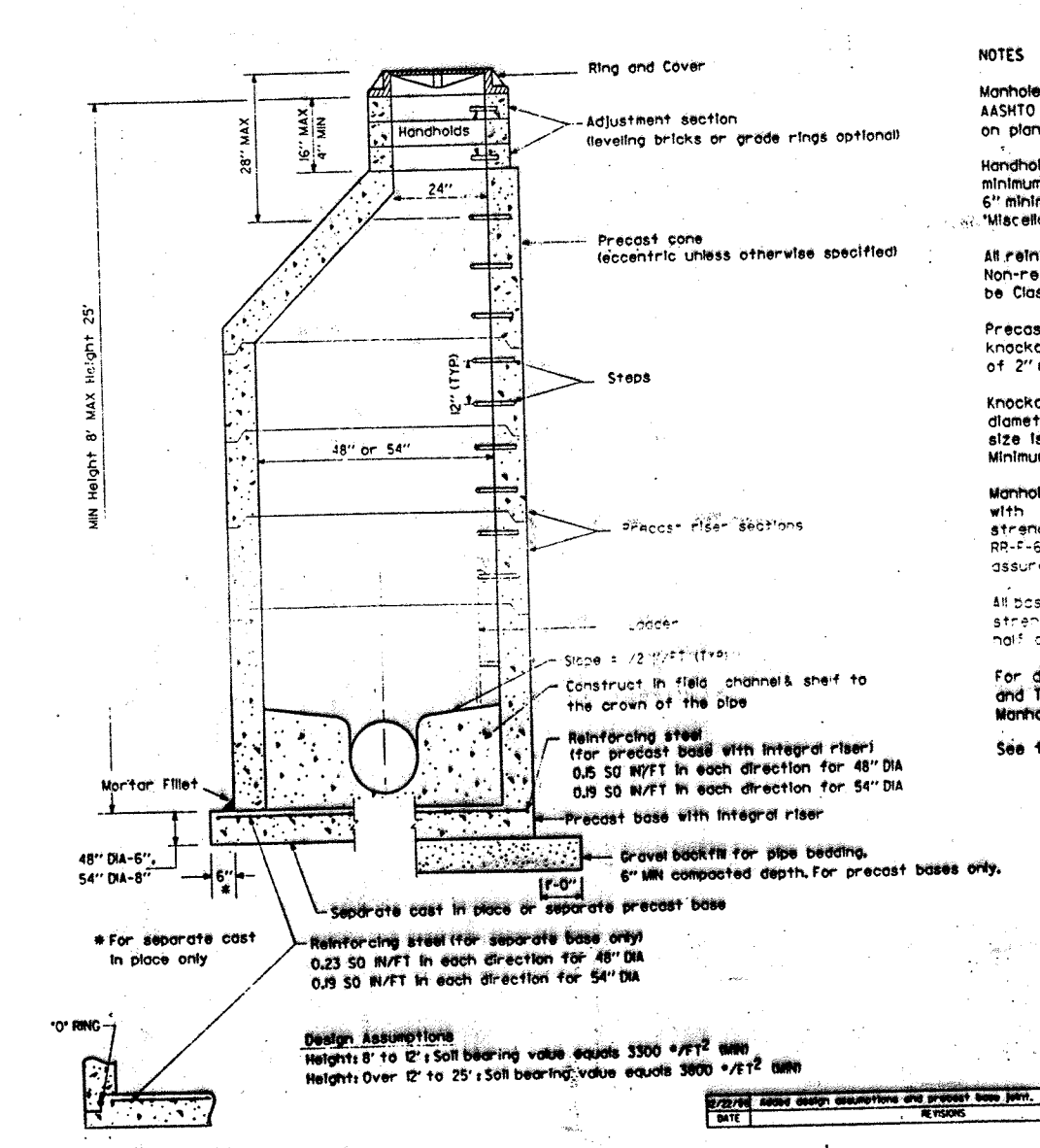


CONCRETE INLET
STANDARD PLAN B-26

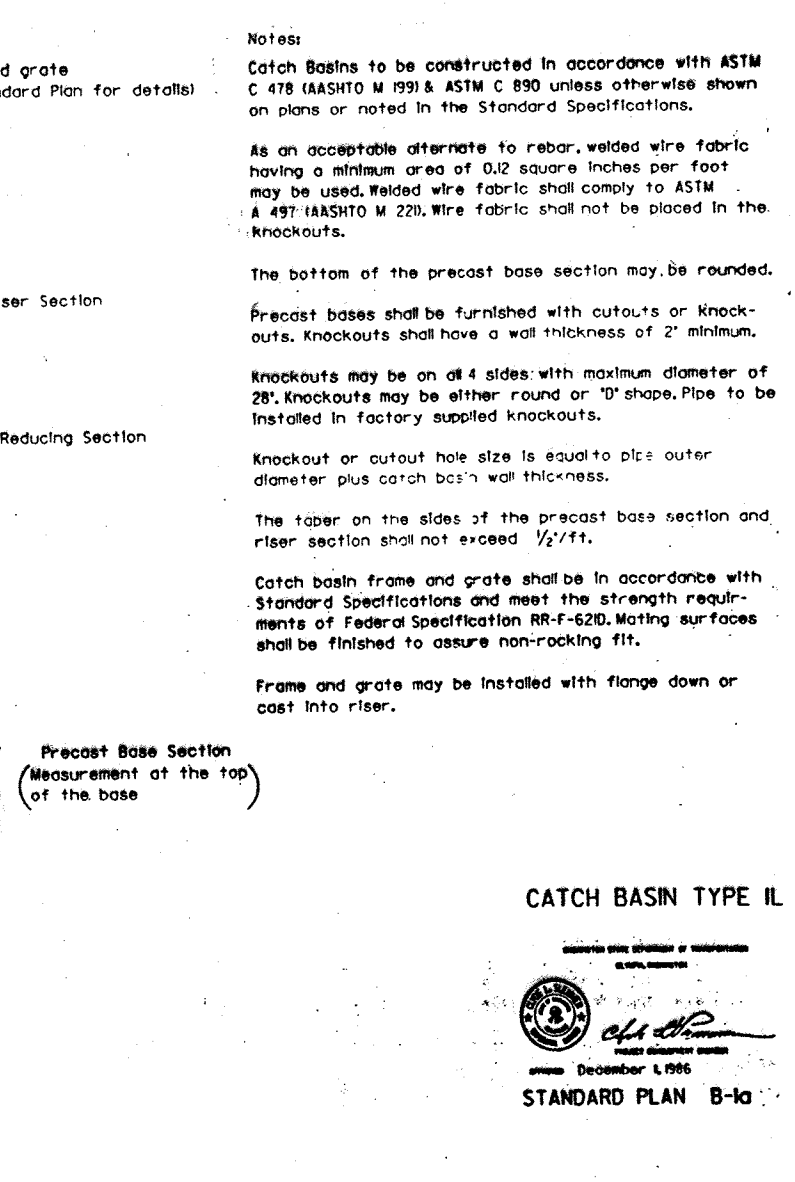


HIGH BEEHIVE GRATE AND FRAME
6014

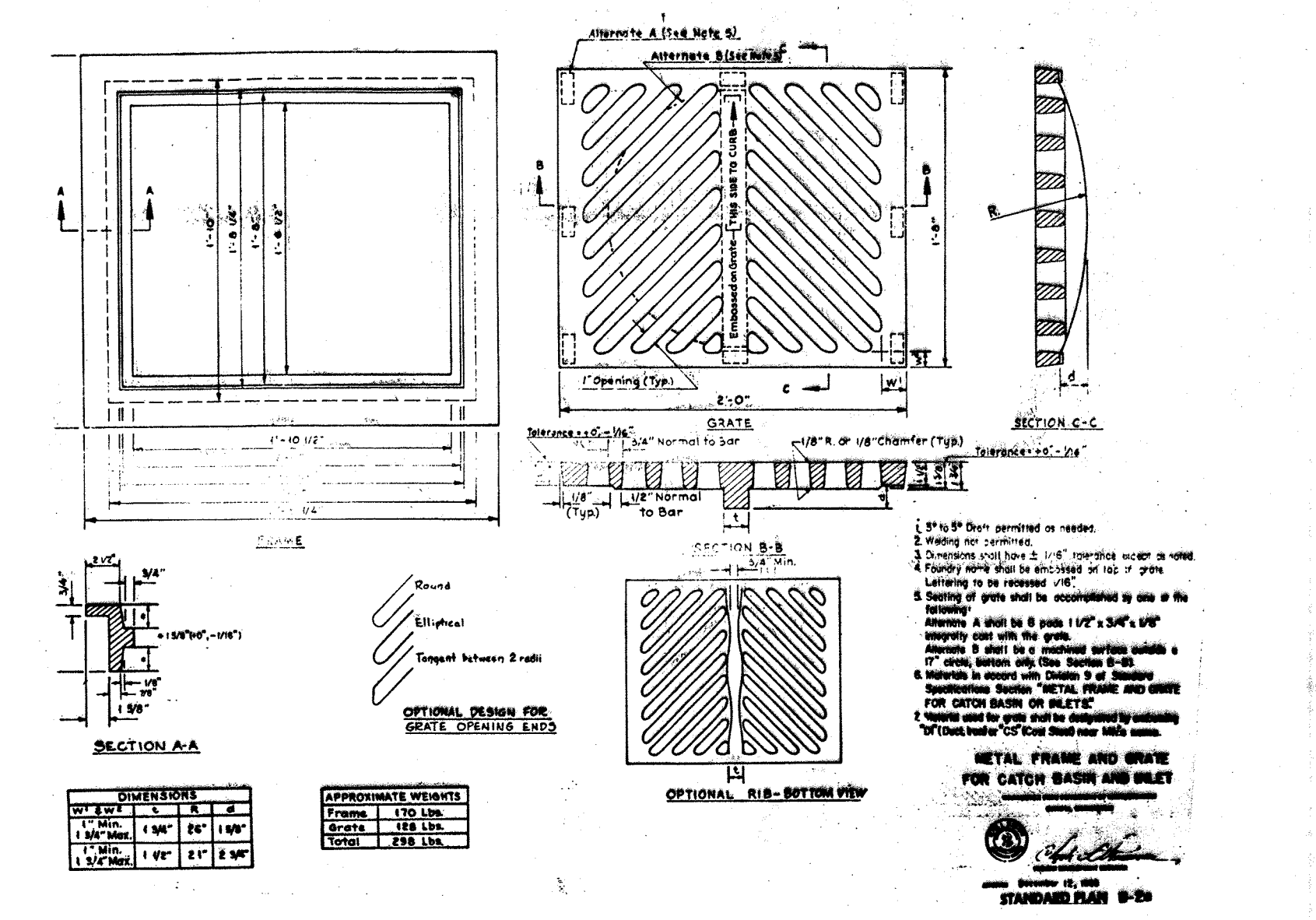
SATHER MANUFACTURING CO., INC.
3330 MAHONIST AVE.
EVERETT, WASHINGTON 98021



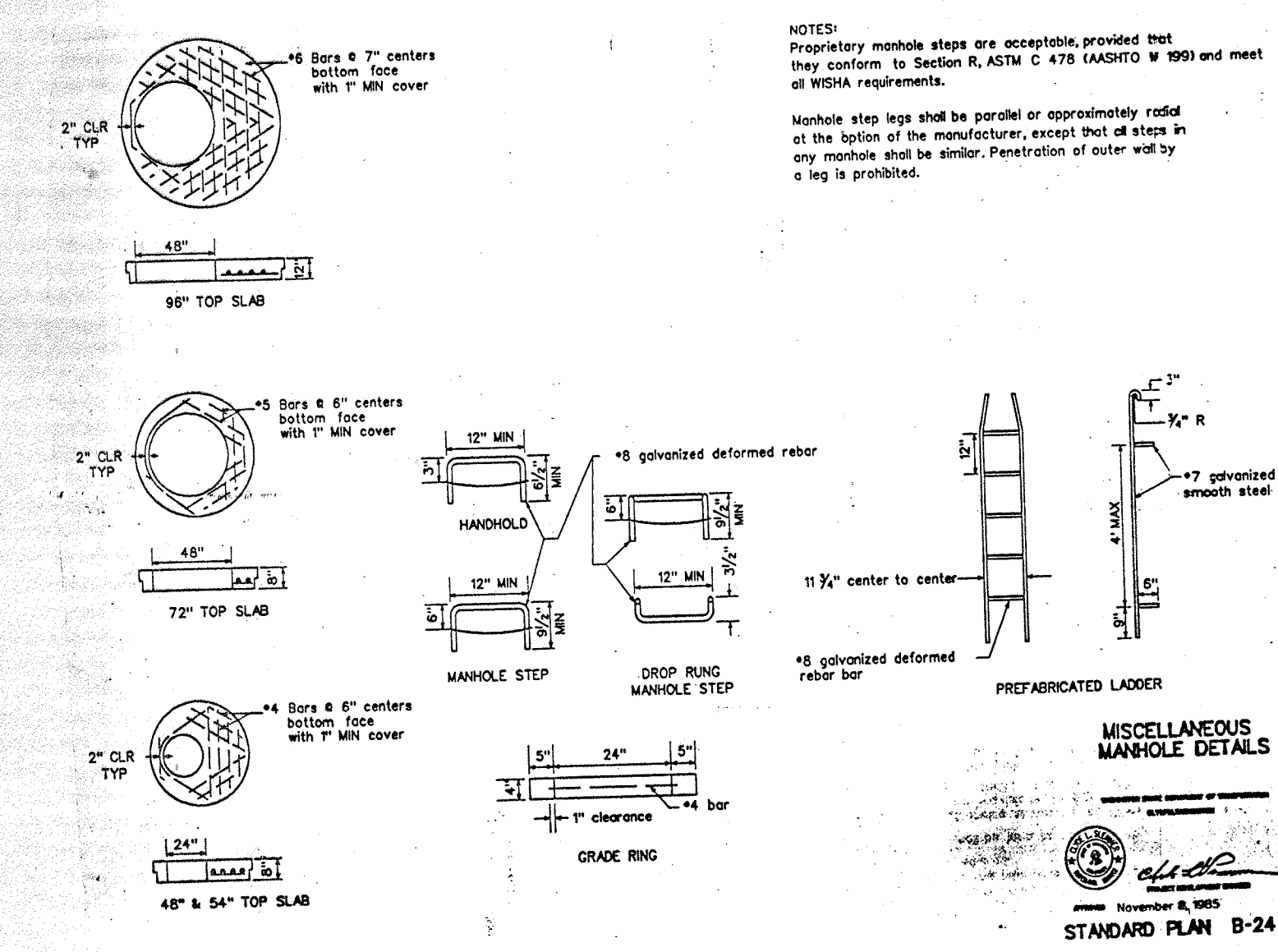
MANHOLE - TYPE 1
48" x 54"
STANDARD PLAN B-23a



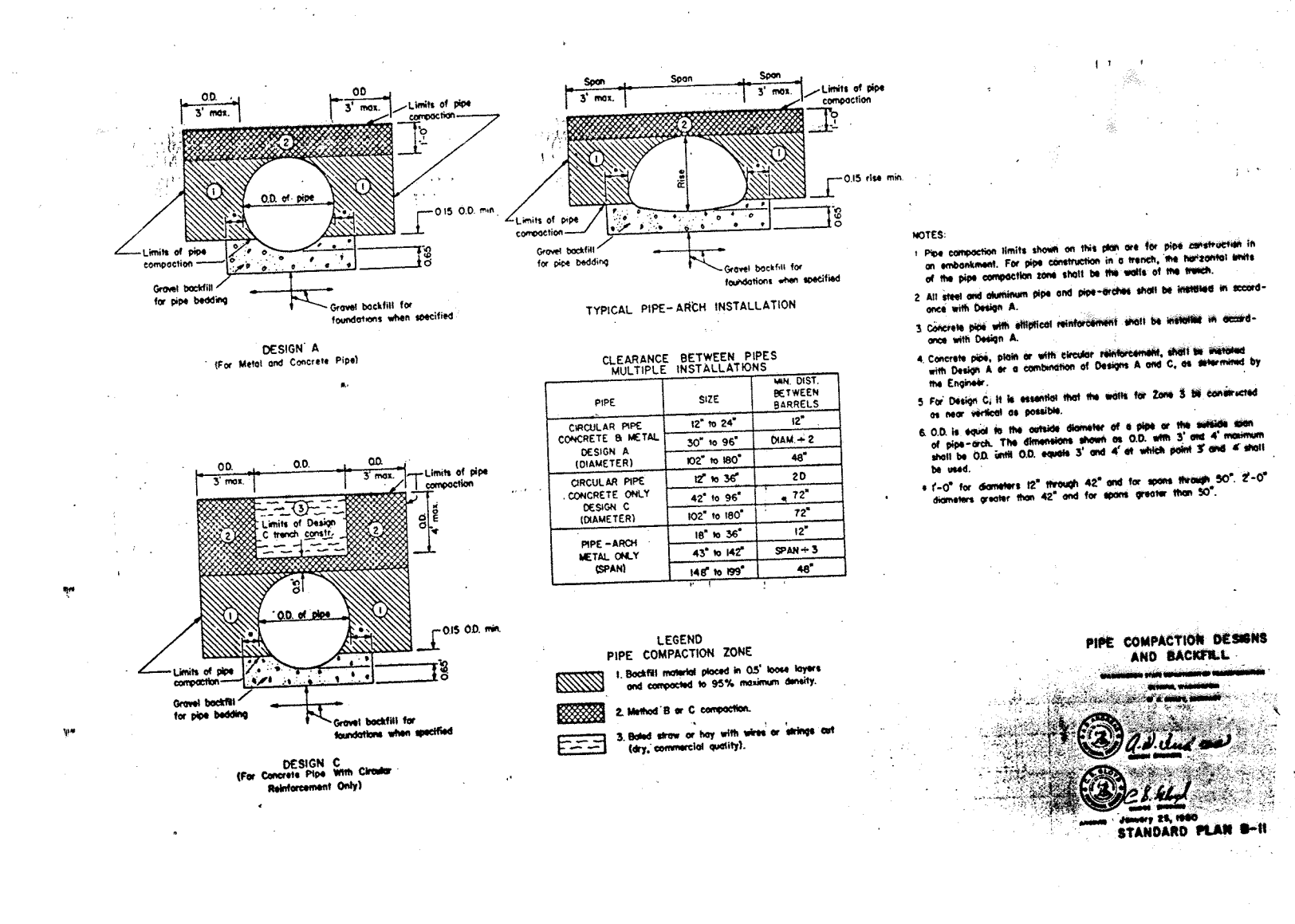
CATCH BASIN TYPE 1L
STANDARD PLAN B-16



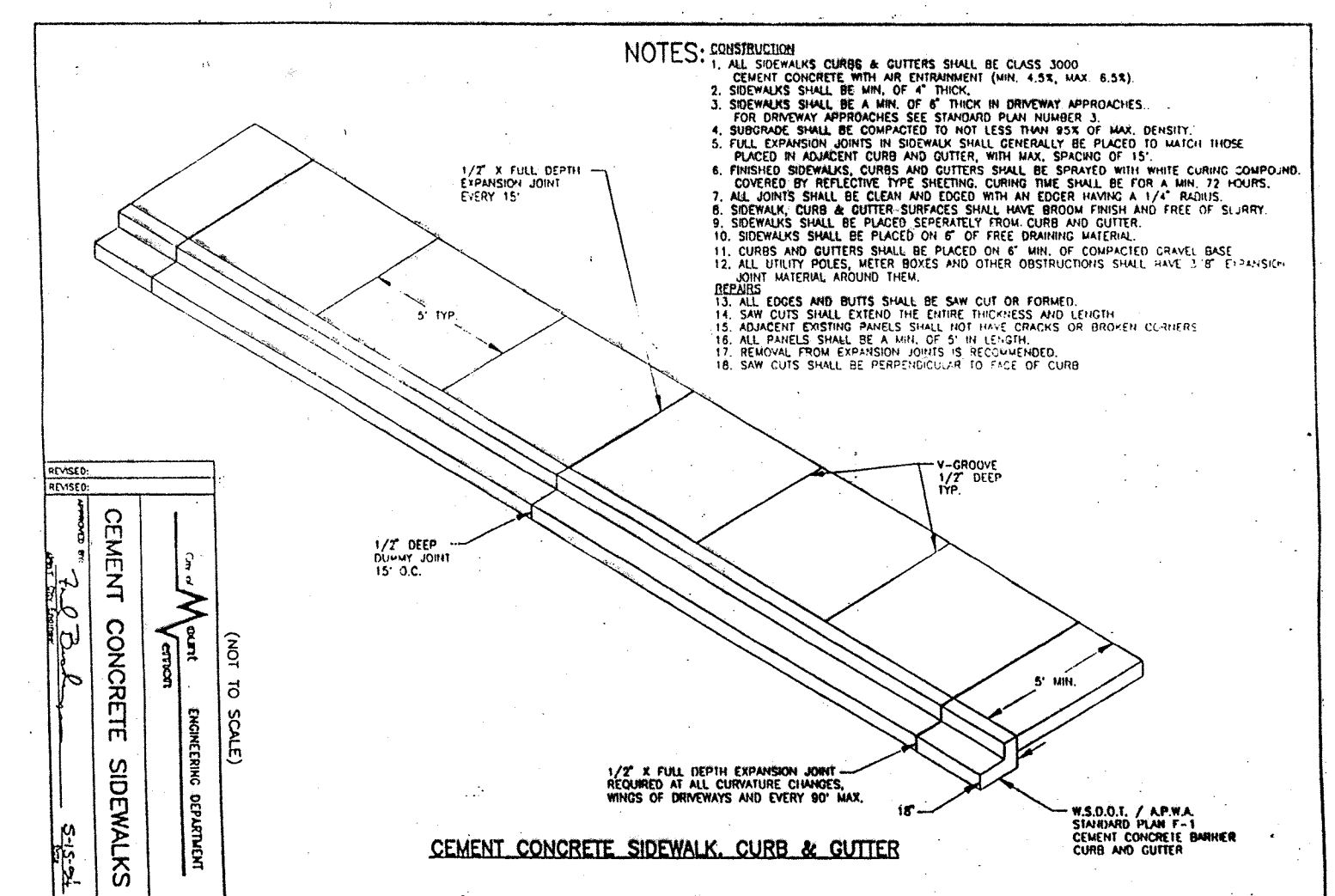
METAL FRAME AND GRATE
STANDARD PLAN B-2b



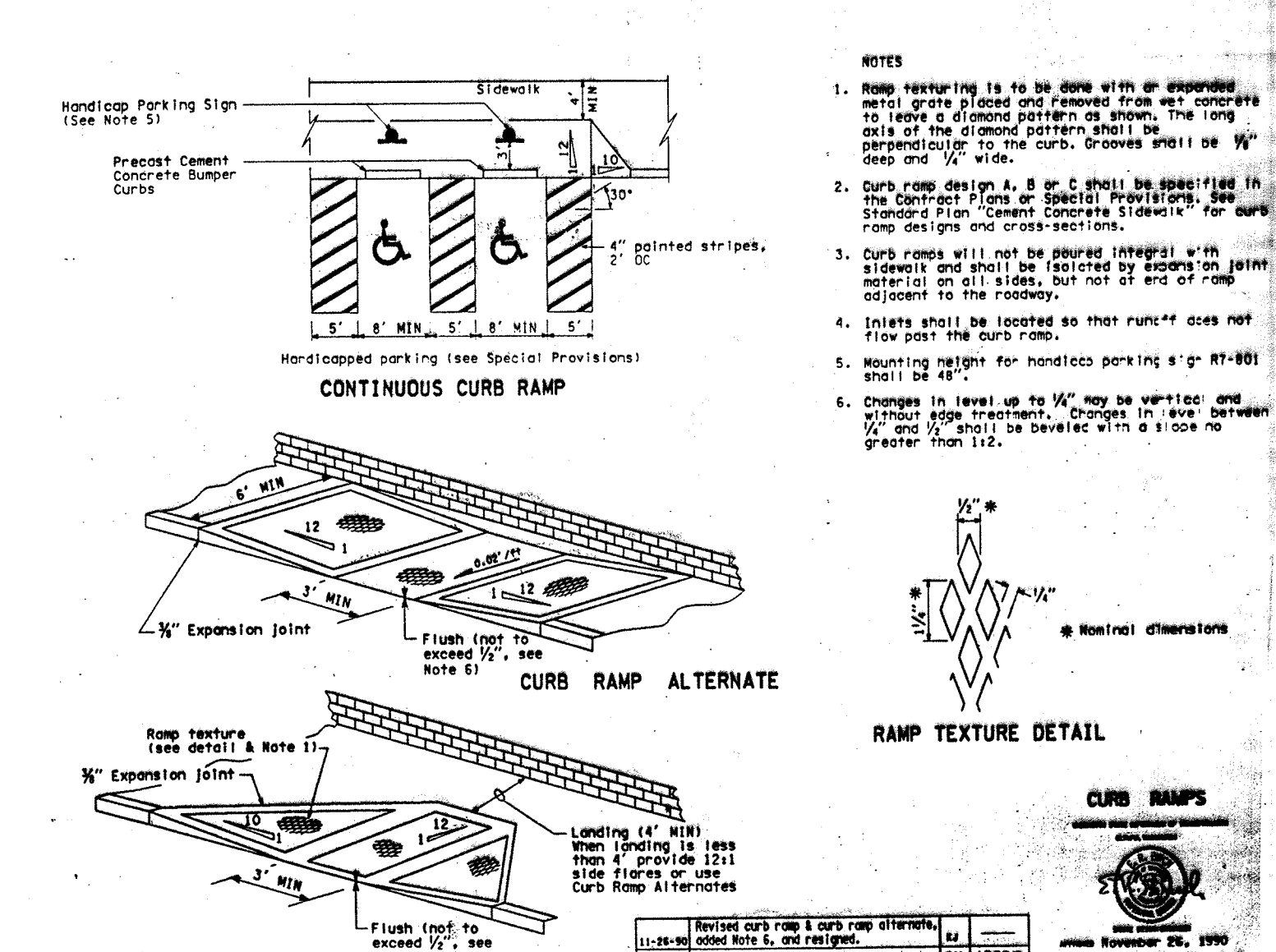
MISCELLANEOUS
MANHOLE DETAILS
STANDARD PLAN B-24



PIPE ARCH
INSTALLATION
STANDARD PLAN B-11



APPROVED FOR CONSTRUCTION
Fred Buckenmeyer
FRED BUCKENMEYER, P.L.S.
Asst. City Engineer
DATE 3/4/97
APPROVAL VOID ONE YEAR FROM DATE OF SIGNATURE



CONTINUOUS CURB RAMP
STANDARD PLAN F-6