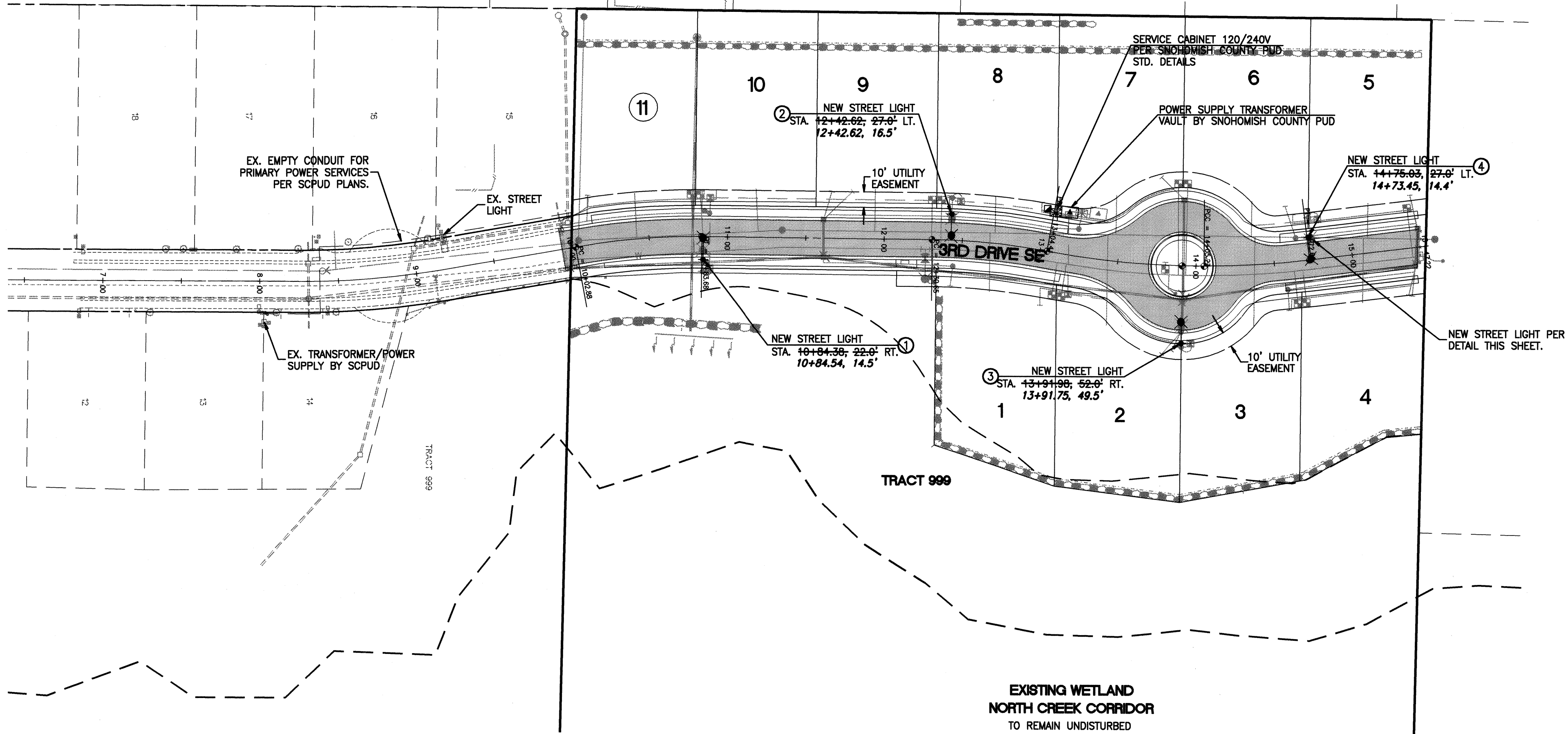


LUMINAIRE SCHEDULE- (RIVER CROSSING NORTH)						
LUMIN. No.	STATION	TYPE 4 DIST.-WAIT	CIRCUIT	MTG. HGT.	BASE PLATE	STREET
①	10+04.30, 22.0' RT. 10+84.54, 14.5'	M-C-111 100	A	19'	DIRECT BURY	3RD DRIVE SE
②	12+42.02, 27.0' LT. 12+42.02, 16.5'	M-C-111 100	A	19'	DIRECT BURY	3RD DRIVE SE
③	13+91.75, 49.5' RT. 13+91.75, 49.5'	M-C-111 100	A	19'	DIRECT BURY	3RD DRIVE SE
④	14+73.45, 27.0' LT. 14+73.45, 14.4'	M-C-111 100	A	19'	DIRECT BURY	3RD DRIVE SE

CONDUCTOR SCHEDULE				
RUN No.	CIRCUIT	CONDUCTOR	CONDUIT	REMARK
①	SCPD	3 No. 6	3" PVC	SCHEDULE 80
②	A	2 No. 8	2" PVC	SCHEDULE 40
③	A	2 No. 8	2" PVC	SCHEDULE 80



LEGEND:

- STREET LIGHT PER CITY OF MILL CREEK STANDARDS
- TYPE ONE J-BOX PER WSDOT STANDARDS
- TYPE TWO J-BOX PER WSDOT STANDARDS
- SERVICE CABINET
- CONDUIT
- STREET LIGHT NUMBER
- POWER SOURCE

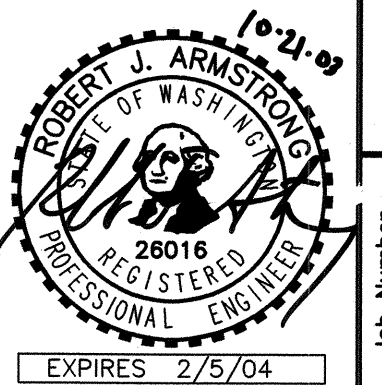
GENERAL NOTES:

- NEW STREET LIGHTING POLE AND LUMINAIRE FIXTURE SHALL BE IN ACCORDANCE WITH THE CITY OF MILL CREEK STANDARDS AND SPECIFICATIONS.
- COSTS ASSOCIATED WITH POWER AND MAINTENANCE OF STREET LIGHTS SHALL BE THE RESPONSIBILITY OF THE CITY OF MILL CREEK, AFTER FIRST YEAR OF OPERATION.
- NEW JUNCTION BOXES SHALL BE PER WSDOT STANDARD PLAN J-110, OR APPROVED EQUAL.
- NEW CONDUIT SHALL HAVE 24" OF MINIMUM COVER.

AS-BUILT

APPROVED BY:

DOUGLAS JACOBSON, P.E.
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING,
SURVEYING, ENVIRONMENTAL SERVICES



Job Number
10189
Sheet
1A of 1

STREET LIGHT AND UTILITY PLAN

RIVER CROSSING NORTH

For: B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

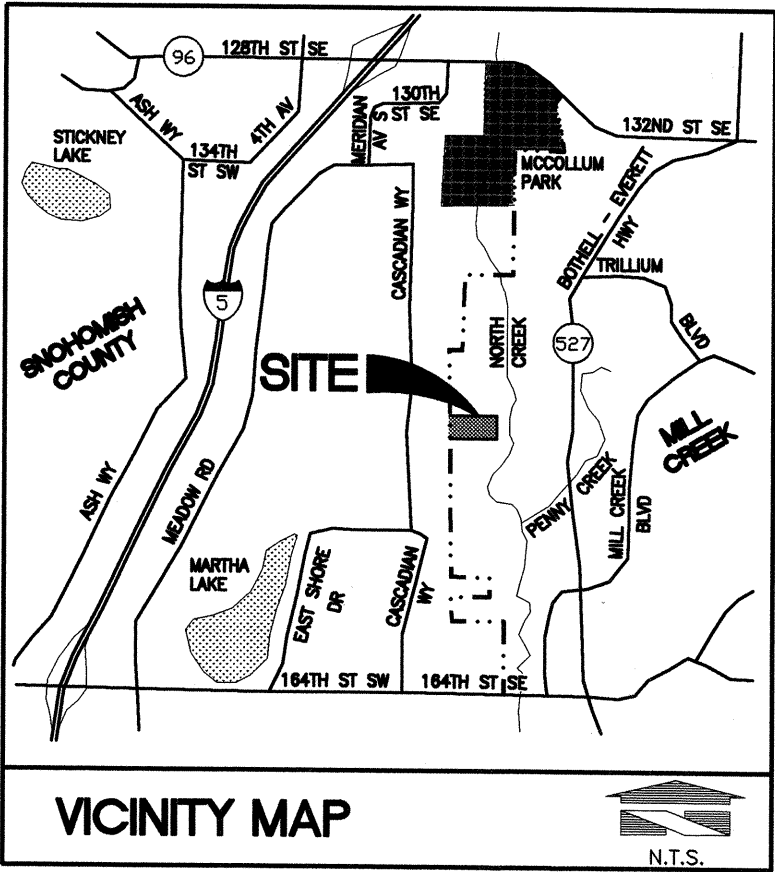
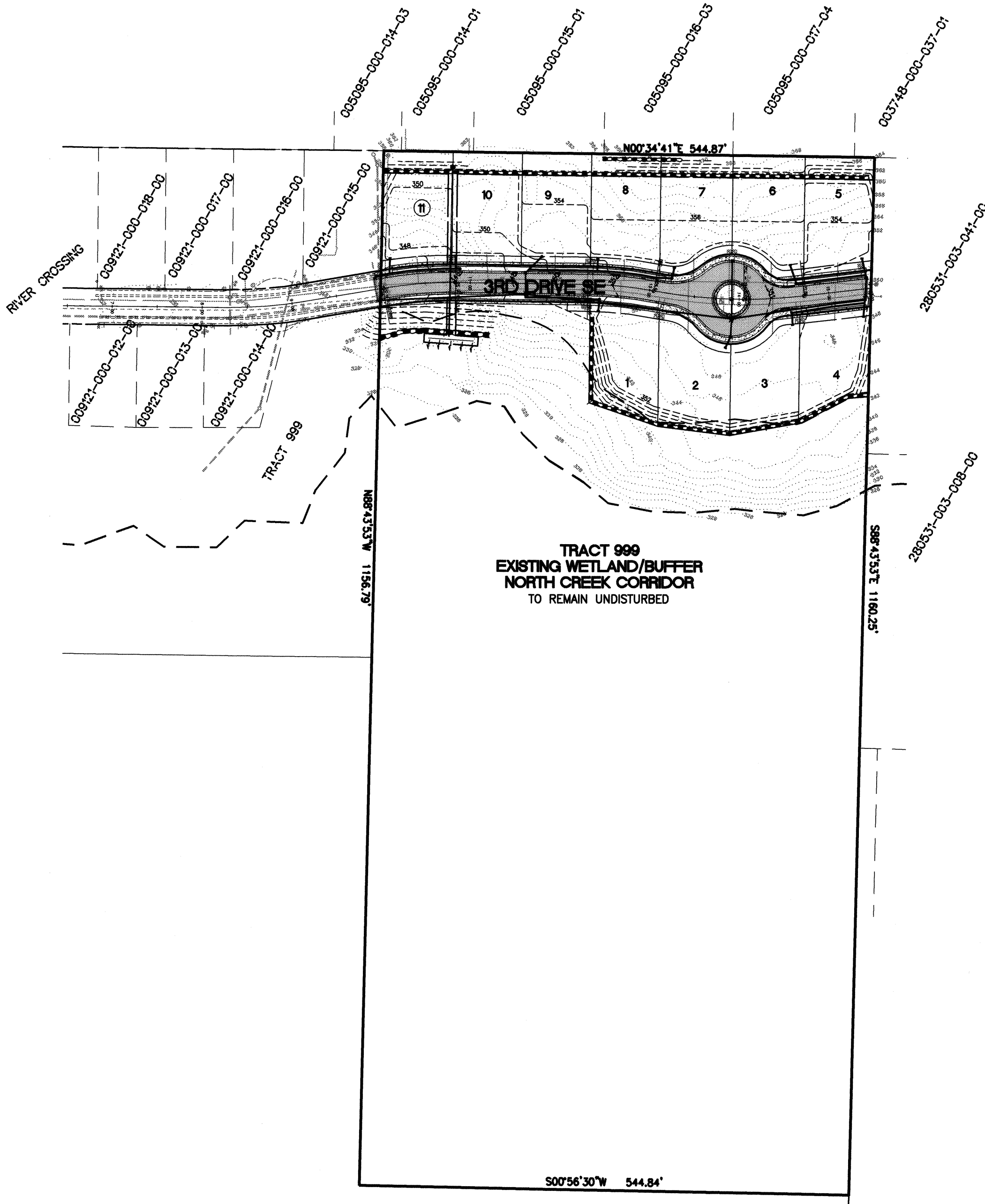
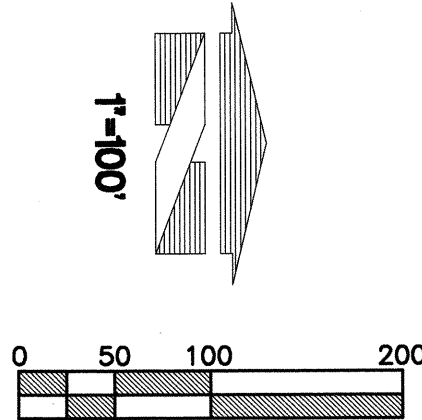
Scale:
Horizontal 1"=50'
Vertical N/A

Designed B.T.
Drawn B.T.
Checked B.T.
Approved B.M.
Date 12/17/02

RIVER CROSSING
NORTH

RIVER CROSSING NORTH

A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



SURVEY NOTES:

1. THE ONSITE TOPOGRAPHIC SURVEY FOR THIS PROJECT WAS PREPARED BY OSTERGAARD/ROBINSON ASSOCIATES INC. CONSULTING ENGINEERS DATED NOVEMBER 4, 1997.
2. ADDITIONAL OFFSITE TOPOGRAPHIC SURVEY PREPARED BY BARGHAUSEN CONSULTING ENGINEERS.
3. WETLAND BOUNDARY FLAGGED BY THE ERC GROUP AND SURVEYED BY TRIAD ASSOCIATES, MAY 1994.
4. WETLAND BOUNDARY VERIFIED BY TERRA ASSOCIATES AND ADDITIONAL FLAGS SURVEYED BY BARGHAUSEN CONSULTING ENGINEERS, INC., 2001.
5. THE BOUNDARY SURVEY FOR THIS PROJECT WAS PREPARED BY BARGHAUSEN CONSULTING ENGINEERS, INC. DATED MARCH 7, 2002.

PROJECT CONTACTS:

- DEVELOPER: B AND J DEVELOPMENT
2630 116TH AVENUE NE, SUITE 100
BELLEVUE, WASHINGTON 98004
(425) 828-6424
CONTACT: GREG NELSON
- ENGINEER: BARGHAUSEN CONSULTING ENGINEERS
18215 72ND AVENUE SOUTH
KENT, WASHINGTON 98032
(425) 251-6222
CONTACT: ROBERT J. ARMSTRONG P.E.
- WATER AND SEWER: SILVER LAKE WATER DISTRICT
2210 132ND ST. S.E.
MILL CREEK, WASHINGTON, 98208
(425) 337-3647
- POWER: SNOHOMISH COUNTY P.U.D.
PHONE: (800) 562-9142
- TELEPHONE: VERIZON
PHONE: (800) 483-4000
- GAS: PUGET SOUND ENERGY
PHONE: (206) 287-3869
- FIRE: SNOHOMISH COUNTY FIRE DISTRICT No. 7, STATION 76
1020 - 152ND PLACE S.E.
MILL CREEK, WA 98012
(425) 338-9630
- SCHOOL: EVERETT SCHOOL DISTRICT No. 2
4730 COLBY AVENUE
EVERETT, WA 98203
(425) 339-4200
- CITY: CITY OF MILL CREEK
15728 MILL CREEK BOULEVARD
MILL CREEK, WA 98208
(425) 745-1891

INDEX TO SHEETS

- | | |
|---|---|
| 1 | COVER SHEET |
| 2 | TOPOGRAPHIC MAP |
| 3 | HORIZONTAL CONTROL PLAN |
| 4 | ROAD AND DRAINAGE PLAN AND PROFILE |
| 5 | GRADING PLAN |
| 6 | ROAD AND DRAINAGE NOTES AND DETAILS |
| 7 | MISCELLANEOUS NOTES AND DETAILS |
| 8 | GRADING, EROSION, AND SEDIMENT CONTROL PLAN |
| 9 | GRADING, EROSION AND SEDIMENT CONTROL NOTES AND DETAILS |

- L1 OF 2 LANDSCAPE MITIGATION PLAN/WETLAND BUFFER
L2 OF 2 LANDSCAPE MITIGATION PLAN/WETLAND BUFFER NOTES AND DETAILS

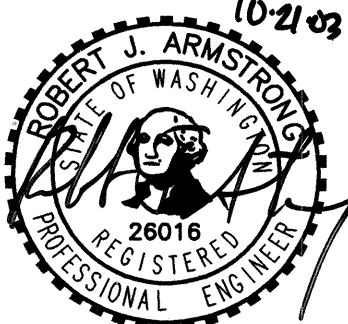
CALL BEFORE YOU DIG:
1-800-424-5555

UTILITY CONFLICT NOTE:

CAUTION:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE # 1-800-424-5555 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

APPROVED BY:

DOUGLAS JACOBSON, P.E. DATE
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



COVER SHEET

RIVER CROSSING NORTH

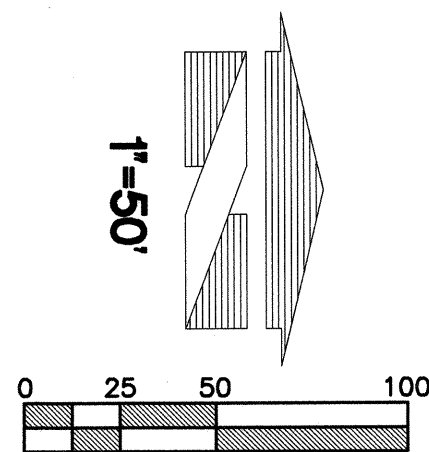
For: B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

Scale: Horizontal 1"=50' Vertical N/A
Designed BJT Drawn BJT Checked BJT Approved RJA Date 3/27/02

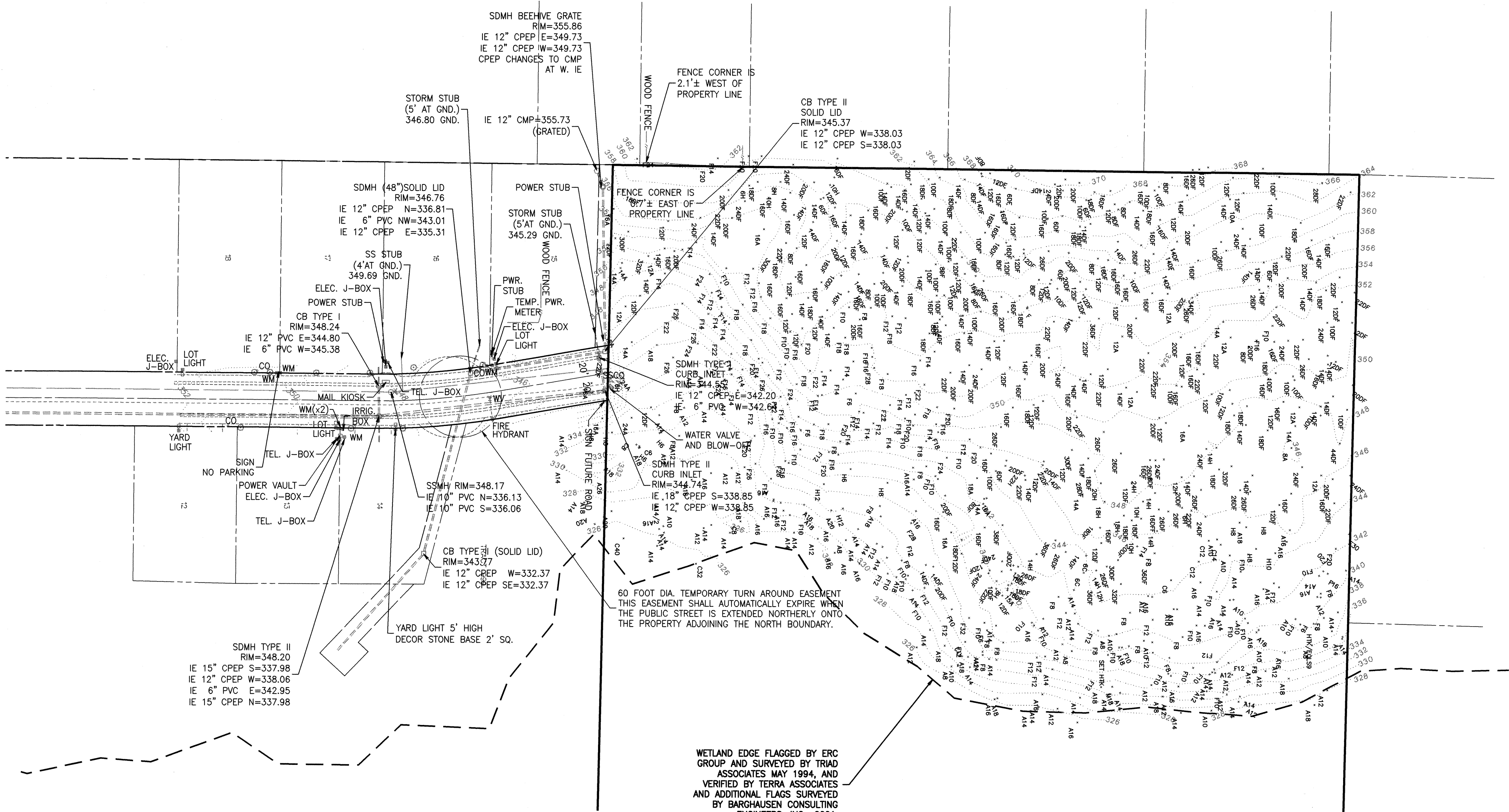
18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
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CIVIL ENGINEERING, LAND PLANNING,
SURVEYING, ENVIRONMENTAL SERVICES



Job Number 10189
Sheet 1A of 9



A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



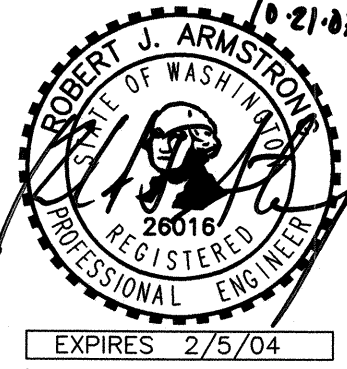
WETLAND EDGE FLAGGED BY ERC GROUP AND SURVEYED BY TRIAD ASSOCIATES MAY 1994, AND VERIFIED BY TERRA ASSOCIATES AND ADDITIONAL FLAGS SURVEYED BY BARGHAUSEN CONSULTING ENGINEERS, INC., 2001.

- TREE LEGEND**
- DF12 TREE TYPE & SIZE (DOUG FIR 12" TYP)
- DF = DOUG FIR
A = ALDER
H = HEMLOCK
F = FIR
C = CEDAR

AS-BUILT

APPROVED BY: _____ DATE _____

DOUGLAS JACOBSON, P.E. DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



Job Number 10189		Sheet 2A of 9	BARGHAUSEN CONSULTING ENGINEERS, INC. 18215 72ND AVENUE SOUTH KENT, WA 98032 (425)251-6222 (425)251-8782 FAX CIVIL ENGINEERING, LAND PLANNING SURVEYING, ENVIRONMENTAL SERVICES	For: B AND J DEVELOPMENT 2630 - 116TH AVENUE NE, SUITE 100 BELLEVUE, WA 98004 (425) 828-6424	Title: TOPOGRAPHIC MAP RIVER CROSSING NORTH
Date 9/13/02					

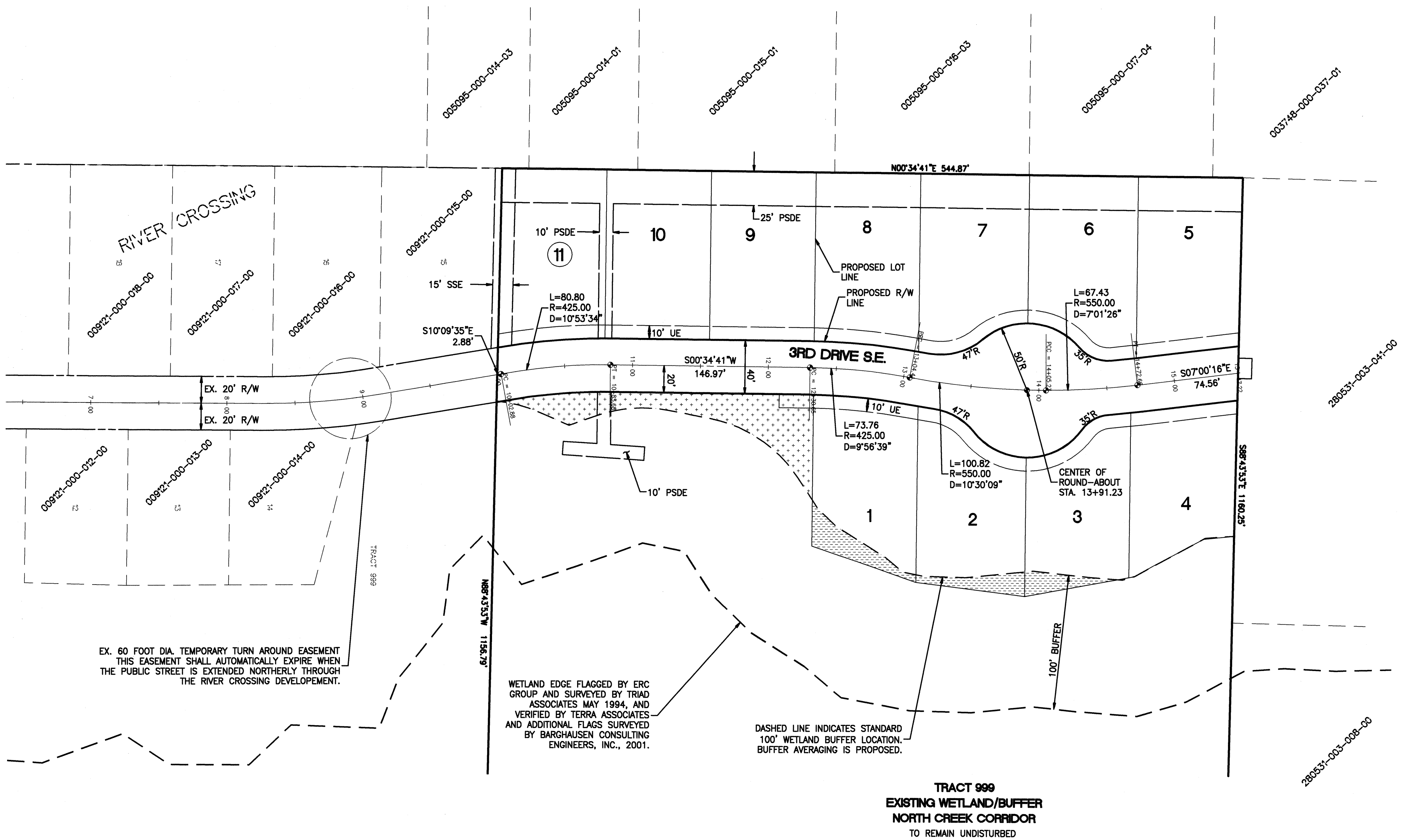
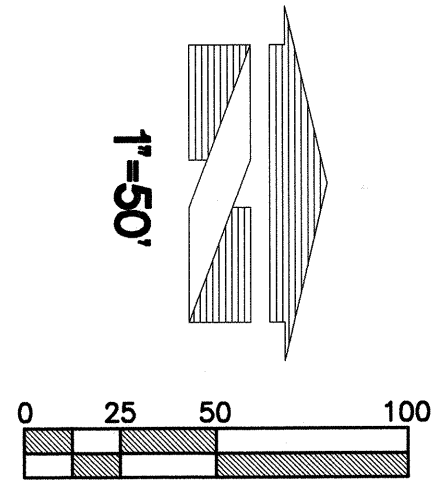
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Designed: BJT Drawn: BJT Checked: BJT Approved: RJA Date: 9/13/02

Revision:
5. 10/01/03 CMT BUT RJA ASBUILT
4. 11/08/02 BUT RJA REVISED BYPASS LINE
3. 10/17/02 BUT RJA REVISED PER CITY REQUEST
2. 9/24/02 BUT RJA REVISED PER CITY REQUEST
1. 8/13/02 BUT RJA REVISED PER CITY REQUEST

HDEV-2197

A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



WETLAND BUFFER TABLE		
1	BUFFER REDUCTION AREA	2,641 S.F.
2	BUFFER MAKE-UP AREA	5,141 S.F.
3	TOTAL NET GAIN IN BUFFER AREA	2,500 S.F.

LOT AREA TABLE			
LOT #	AREA (S.F.)	LOT #	AREA (S.F.)
1	9405	7	9917
2	9326	8	9816
3	8623	9	9625
4	8404	10	9625
5	9877	11	9933
6	10,041		
TOTAL LOT AREA		104,592 S.F.	2.40 AC.
TRACT 999		500,537 S.F.	11.49 AC.
RIGHT OF WAY AREA		26,069 S.F.	0.60 AC.
TOTAL PROPERTY AREA		63,483 S.F.	14.49 AC.

ABBREVIATIONS:
PSDE PRIVATE STORM DRAINAGE EASEMENT
BSBL BUILDING SETBACK LINE
SDE PUBLIC STORM DRAINAGE EASEMENT
SWE SIDEWALK EASEMENT
WLE WATERLINE EASEMENT
SSE SANITARY SEWER EASEMENT
R/W RIGHT-OF-WAY
UE UTILITIES EASEMENT (All Utilities Public and Private Including Power, Gas, TV, Water, Sewer, Public Sidewalk, and Public and Private Drainage.)
SF SQUARE FEET
HOA HOME OWNERS ASSOCIATION
6'R HEIGHT OF ROCKERY

LEGAL DESCRIPTION

SNOHOMISH COUNTY, WASHINGTON, LOT 4, IN SECTION 6, TOWNSHIP 27 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN, IN THE NORTH 544.87 FEET, AS MEASURED ALONG THE WEST LINE THEREOF, OF GOVERNMENT

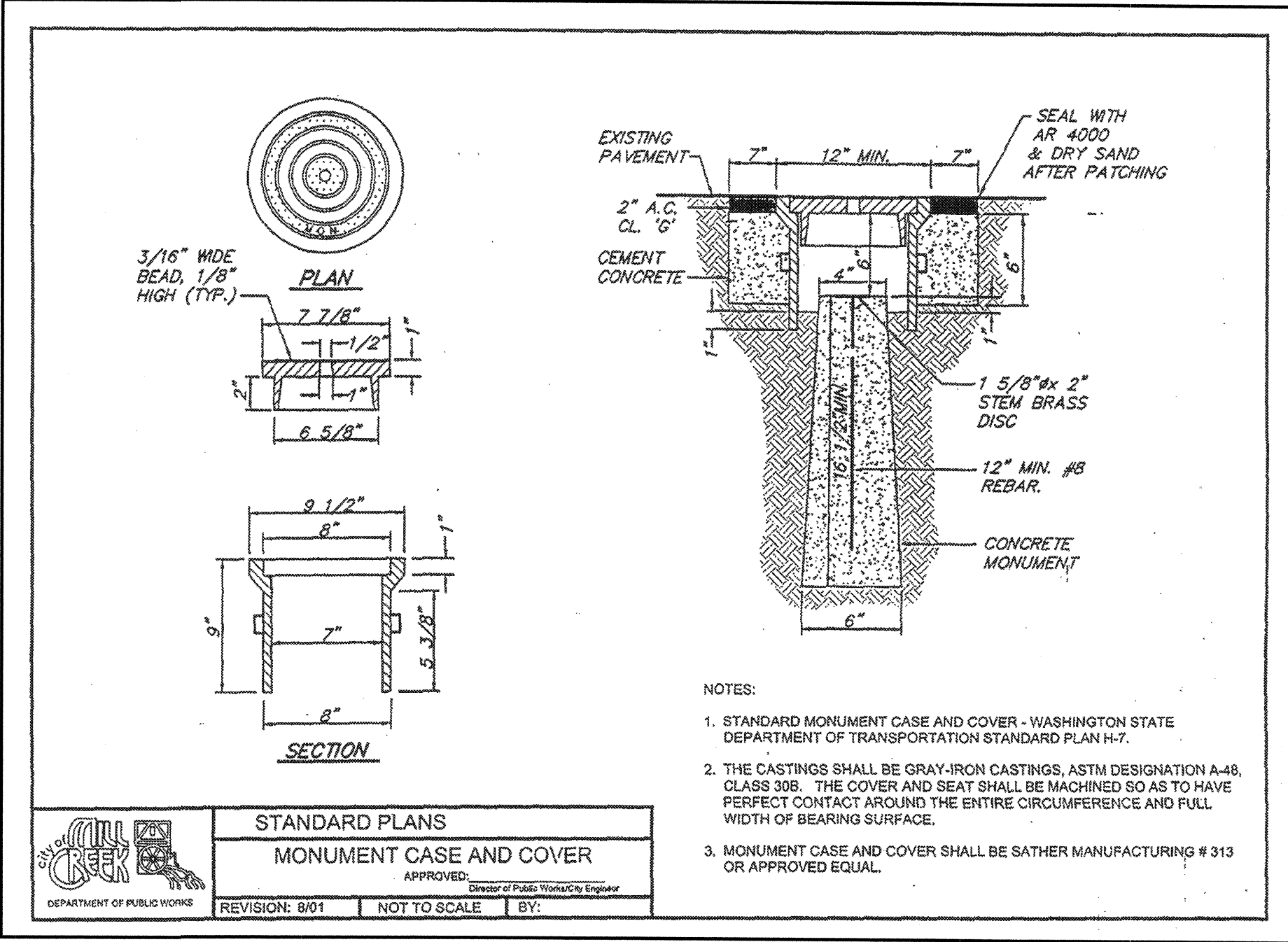
BEARINGS

BASIS OF BEARINGS AND SECTION SUBDIVISION PER RECORD OF SURVEY BY BRADLEY T. FREEMAN DATED APRIL, 1998 AND RECORDED UNDER RECORDING NO. 9808275006, RECORDS OF SNOHOMISH COUNTY, WASHINGTON. WE HELD THE MONUMENT AT THE CENTER 1/4 CORNER FOR POSITION, AND THE BEARING OF N01°19'03"E TOWARD THE MONUMENT AT THE N 1/4 CORNER.

DATUM

VERTICAL DATUM IS NGVD 1929. BENCHMARK IS CHISELED SQUARE AT THE SW CORNER OF A CONCRETE SLAB, APPROXIMATELY 12" SOUTH AND 6" WEST OF A FLAGPOLE AT THE HAMMIT PUBLIC LIBRARY, 15429 BOTHELL-EVERETT HIGHWAY. ELEVATION=316.66 FEET.

MONUMENT PER DETAIL THIS SHEET



- NOTES:
1. STANDARD MONUMENT CASE AND COVER - WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLAN H-7.
 2. THE CASTINGS SHALL BE GRAY-IRON CASTINGS, ASTM DESIGNATION A-48, CLASS 30B. THE COVER AND SEAT SHALL BE MACHINED SO AS TO HAVE PERFECT CONTACT AROUND THE ENTIRE CIRCUMFERENCE AND FULL WIDTH OF BEARING SURFACE.
 3. MONUMENT CASE AND COVER SHALL BE SATHER MANUFACTURING # 313 OR APPROVED EQUAL.

AS-BUILT

APPROVED BY: _____
DOUGLAS JACOBSON, P.E. DATE
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



Job Number
10189

Sheet
3A of 9

For:
B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

Scale:
Horizontal 1"=50'
Vertical N/A

Designed By: BUT
Drawn By: BUT
Checked By: BUT
Approved By: RJA
Date: 4/01/02

Revision

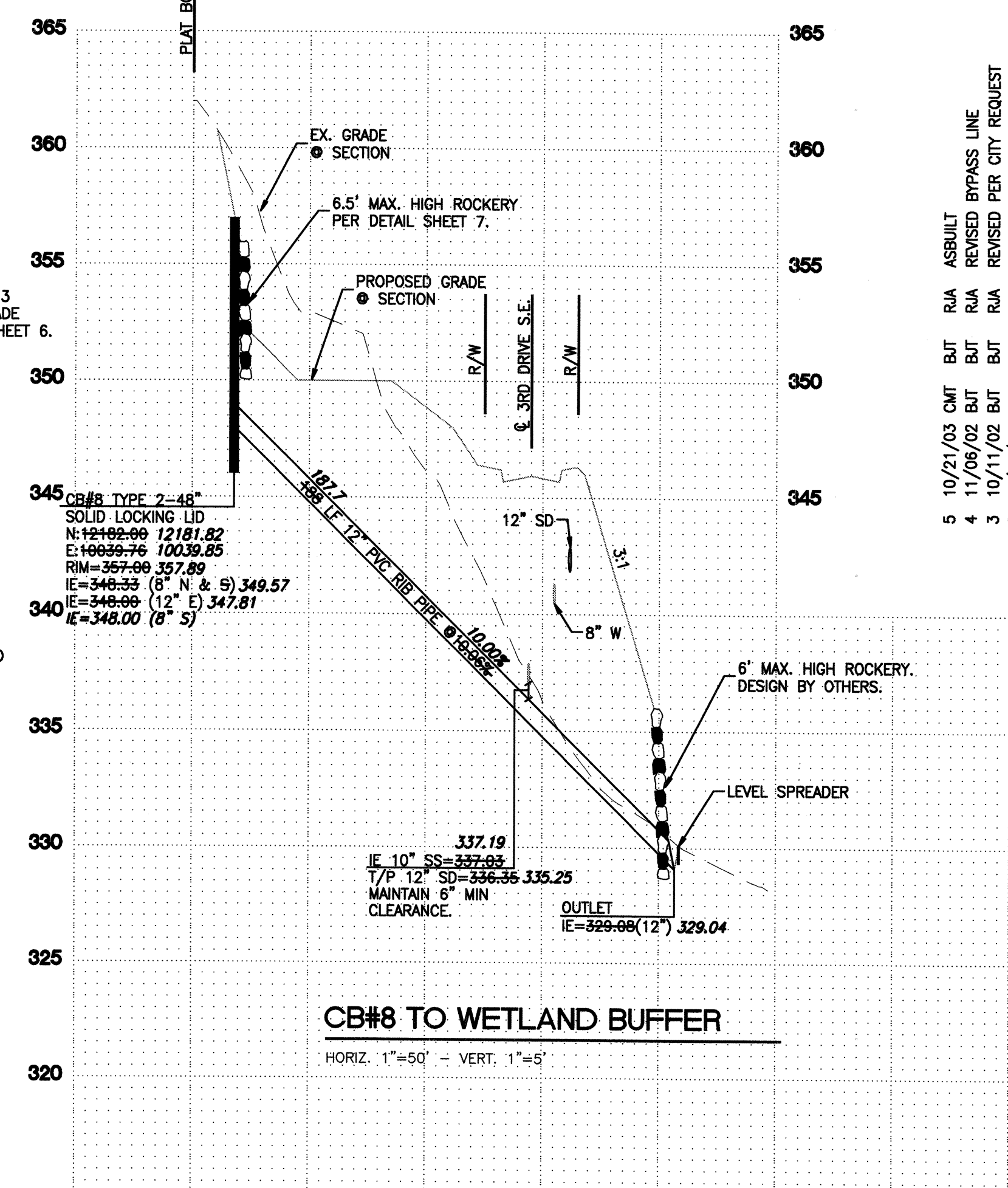
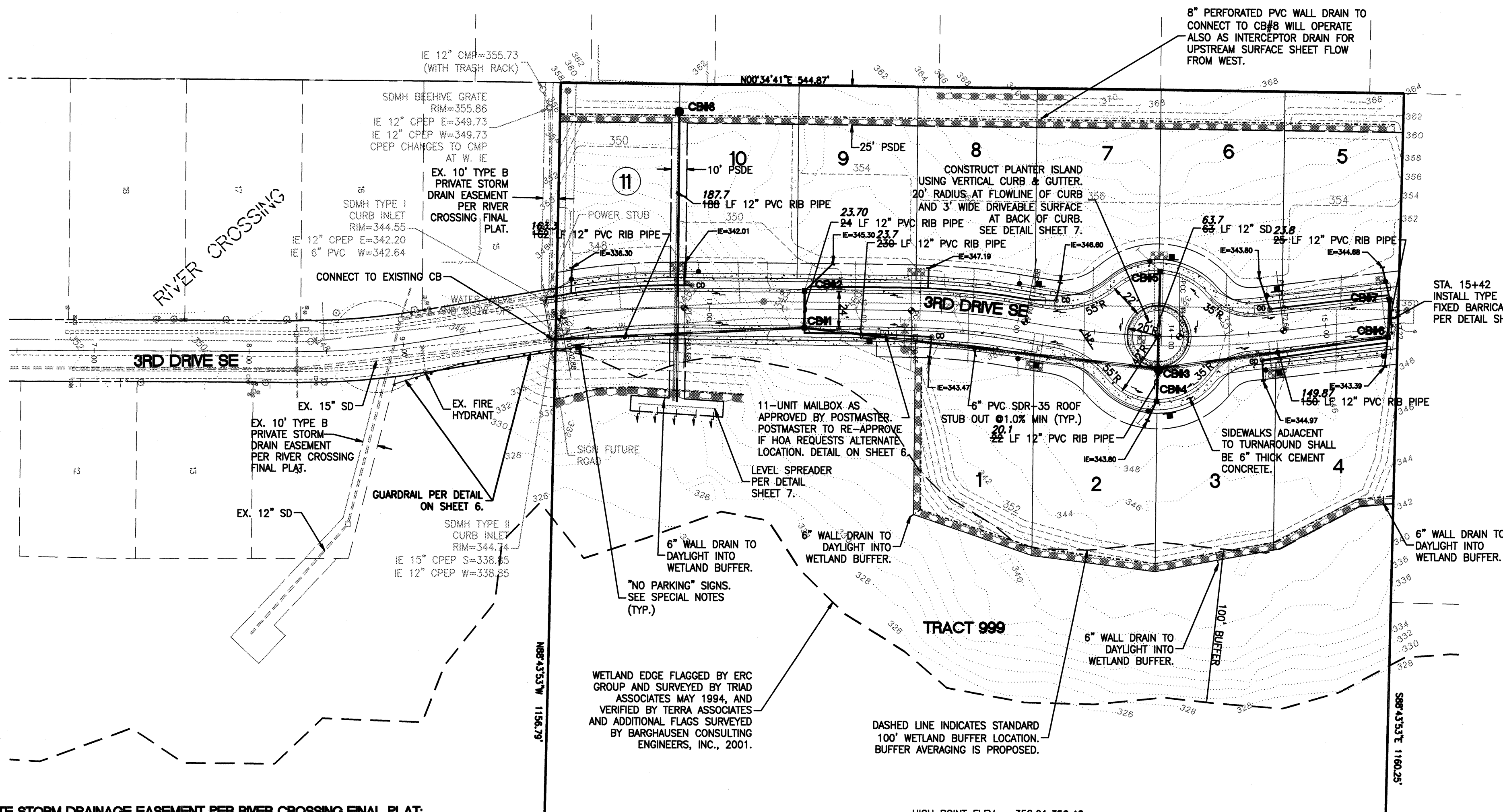
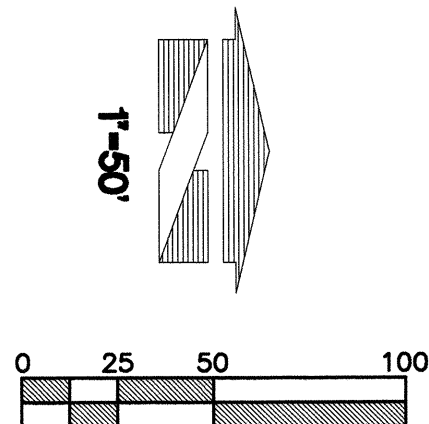
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4	11/06/02	BUT	BUT	
3	10/01/02	BUT	BUT	
2	9/24/02	BUT	BUT	
1	8/13/02	BUT	BUT	

Horizontal Control Plan

RIVER CROSSING NORTH

File Path: C:\Users\jacobson\Documents\10189\10189.dwg
Date/Time: 10/21/2003 15:10
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Scale: 1"=50'
Scale: 1"=50'

A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



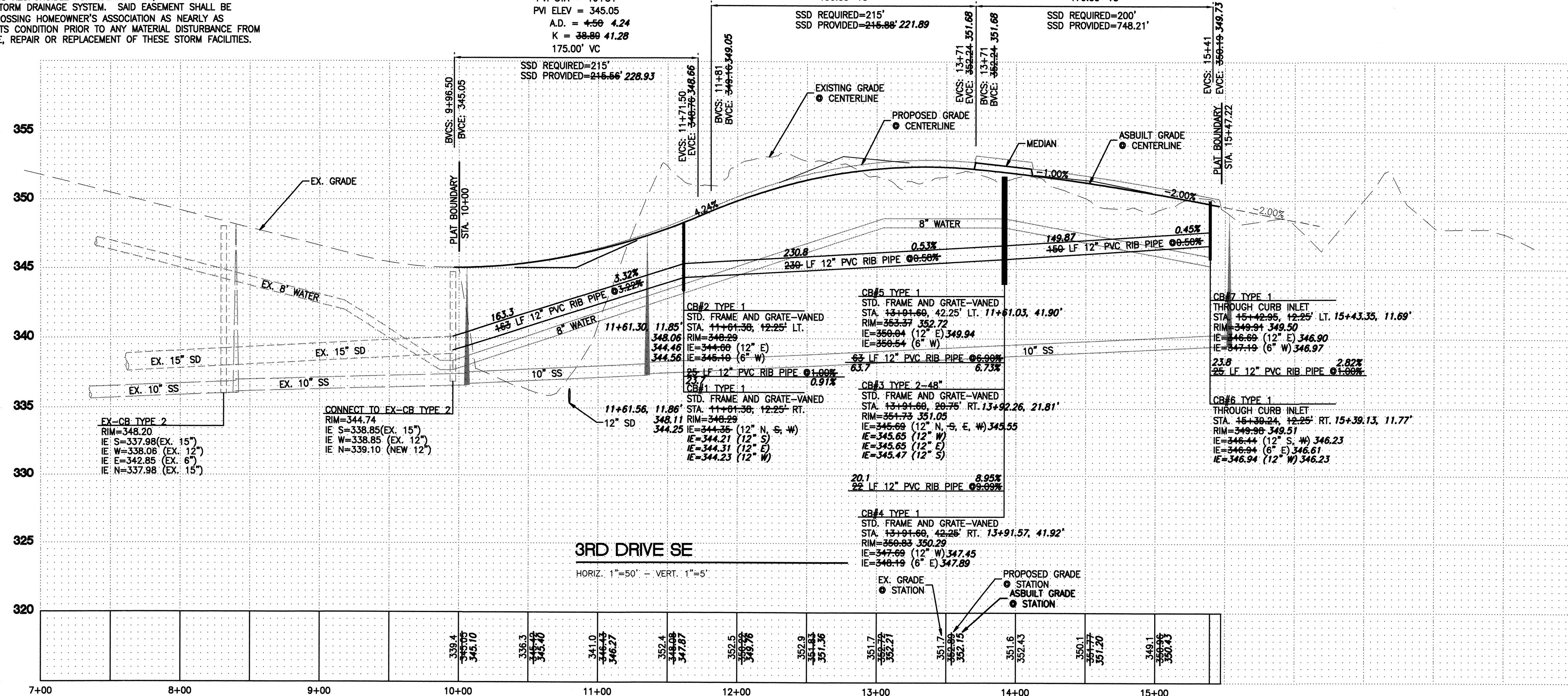
TYPE "B" PRIVATE STORM DRAINAGE EASEMENT PER RIVER CROSSING FINAL PLAT:

THE EASEMENTS DESIGNATED AS TYPE "B" PRIVATE STORM DRAINAGE EASEMENTS WITHIN TRACTS 998 AND 999 AND WITHIN LOTS 10, 14, 15, 19, 20, 29, 31, 32, 34-36, 43, 44, AND 48 ARE FOR THE PURPOSE OF CONVEYING EXISTING STORM WATER FLOW, ORIGINATING OFFSITE, ACROSS THIS PLAT. NO STRUCTURES ARE PERMITTED WITHIN THESE EASEMENTS EXCEPT FOR FENCES AND ROCKERIES. THE RIVER CROSSING HOMEOWNER'S ASSOCIATION IS RESPONSIBLE FOR MAINTENANCE, REPAIRS AND RECONSTRUCTION OF THIS STORM DRAINAGE SYSTEM. SAID EASEMENT SHALL BE RESTORED BY THE RIVER CROSSING HOMEOWNER'S ASSOCIATION AS NEARLY AS REASONABLE POSSIBLE, TO ITS CONDITION PRIOR TO ANY MATERIAL DISTURBANCE FROM CONSTRUCTION, MAINTENANCE, REPAIR OR REPLACEMENT OF THESE STORM FACILITIES.

LOW POINT ELEV = 345.05
LOW POINT STA = 9+96.50
PVI STA = 10+84
PVI ELEV = 345.05
A.D. = 4+50 4.24
K = 38.89 41.28
175.00' VC

HIGH POINT ELEV = 352.94 352.42
HIGH POINT STA = 13+36.52 13+34.80
PVI STA = 12+76
PVI ELEV = 353.89 353.19
A.D. = -5.58 -5.24
K = 34.66 36.28
190.00' VC

PVI STA = 14+56
PVI ELEV = 351.89 351.39
A.D. = -1.00
K = 169.65
170.00' VC



SPECIAL NOTES:

- ALL CATCH BASIN LIDS AND VANED GRATES SHALL BE LOCKING TYPE, EXCEPT FOR ROLLED GRATES.
- ALL CATCH BASIN OFF-SETS ARE MEASURED TO CENTER OF GRATE (NOT CENTER OF STRUCTURE).
- IF FIELD CONDITIONS NECESSITATE THE NEED FOR A SECOND OUTFALL, FOR THE UPSTREAM BASIN, BETWEEN LOTS 3, 4, 5, AND 6, CONTACT ENGINEER FOR DESIGN OF CATCH BASINS, STORM PIPE, AND LEVEL SPREADER.
- "NO PARKING" SIGNS TO BE INSTALLED ALONG EAST SIDE OF 3RD DRIVE SE AND BOTH SIDES OF THE TURNAROUND. EXACT NUMBER OF SIGNS AND LOCATIONS TO BE DETERMINED BY CITY AT THE TIME OF INSTALLATION.

AS-BUILT



APPROVED BY:
DOUGLAS JACOBSON, P.E.
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

ROAD AND DRAINAGE PLAN
AND PROFILE

B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

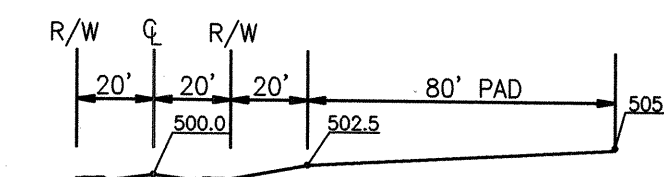
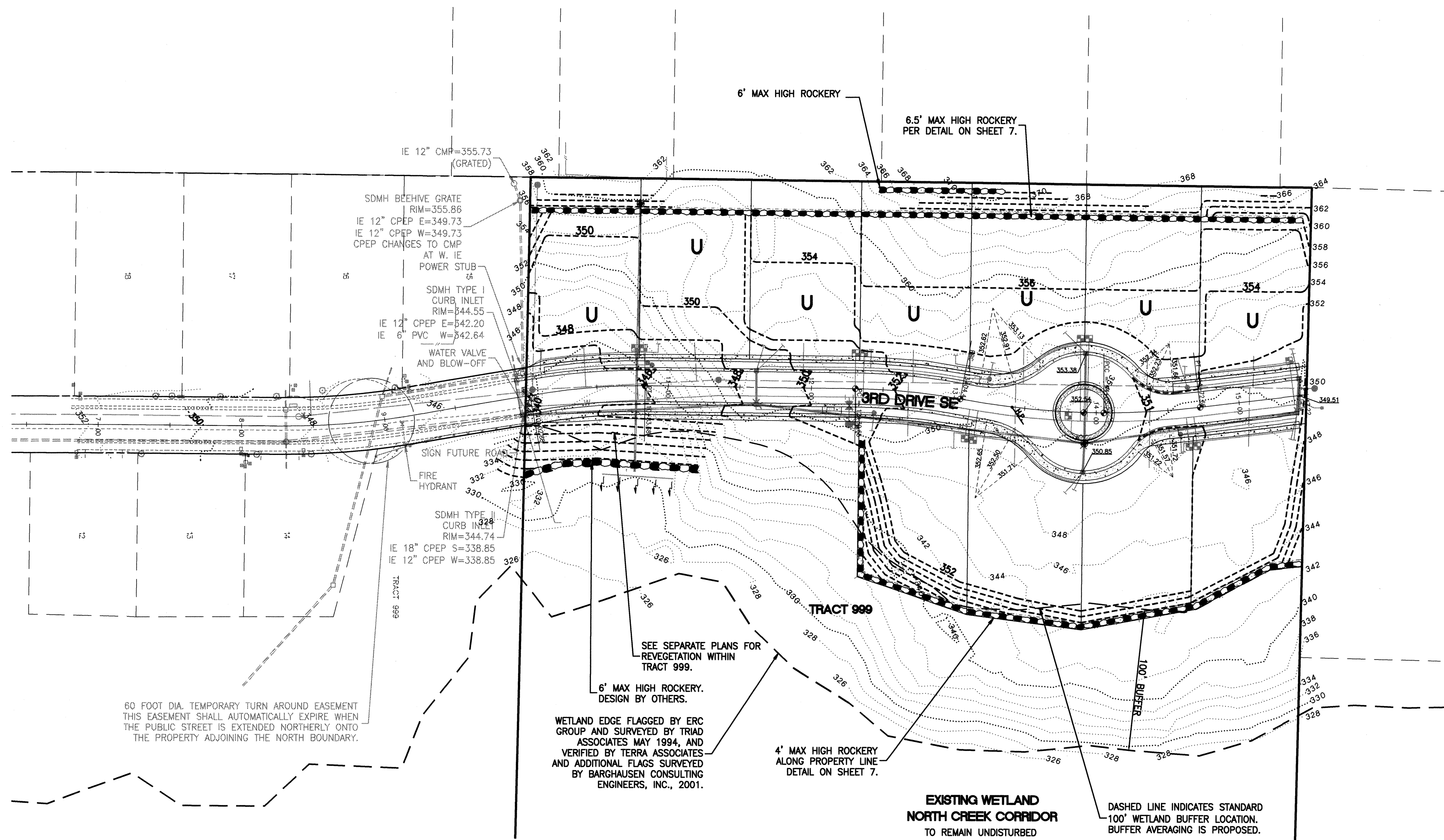
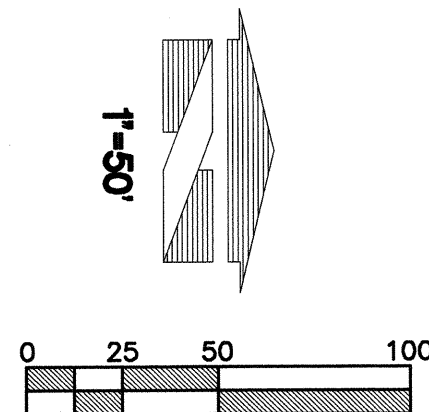
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Approved	1"=50'	N/A
Date	3/27/02	

18215 72ND AVENUE SOUTH
KENT, WA 98032
(425) 251-6222
(425) 251-8782 FAX



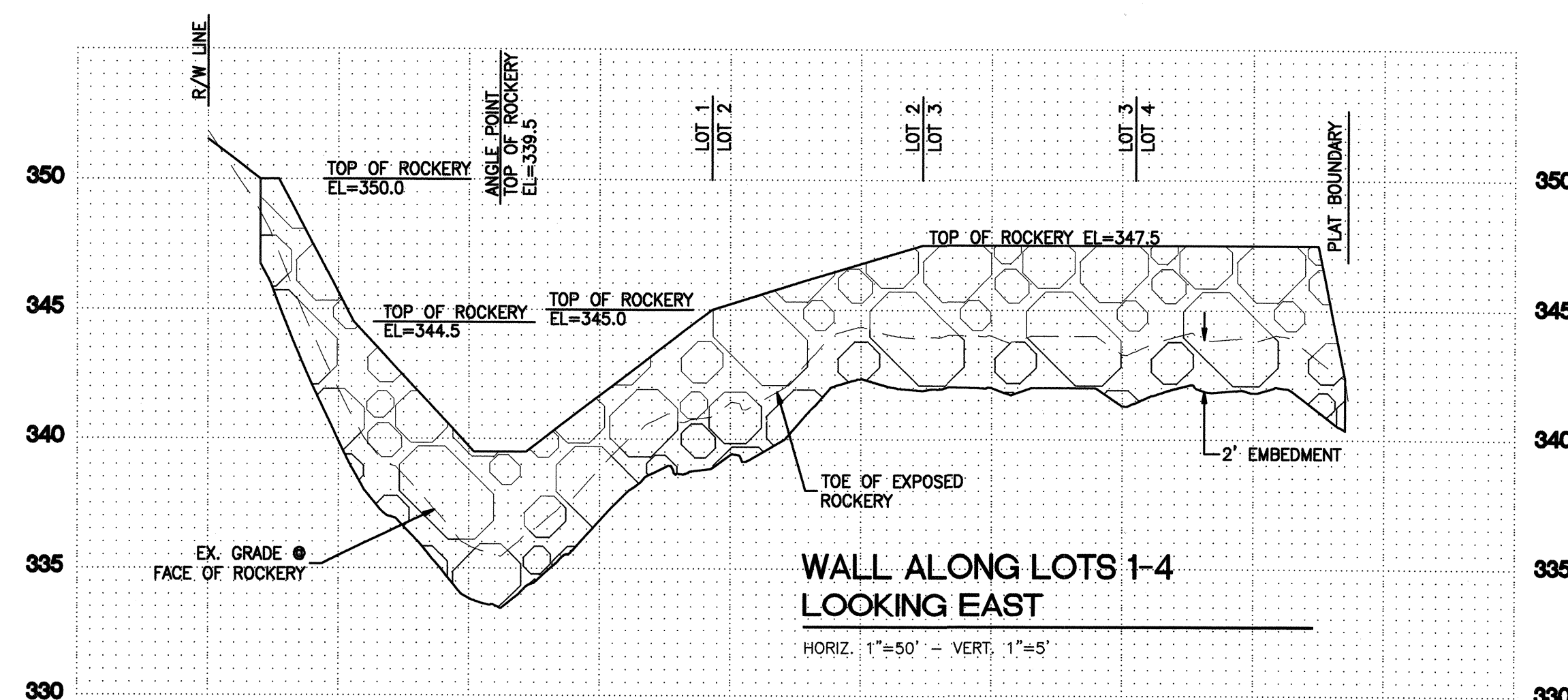
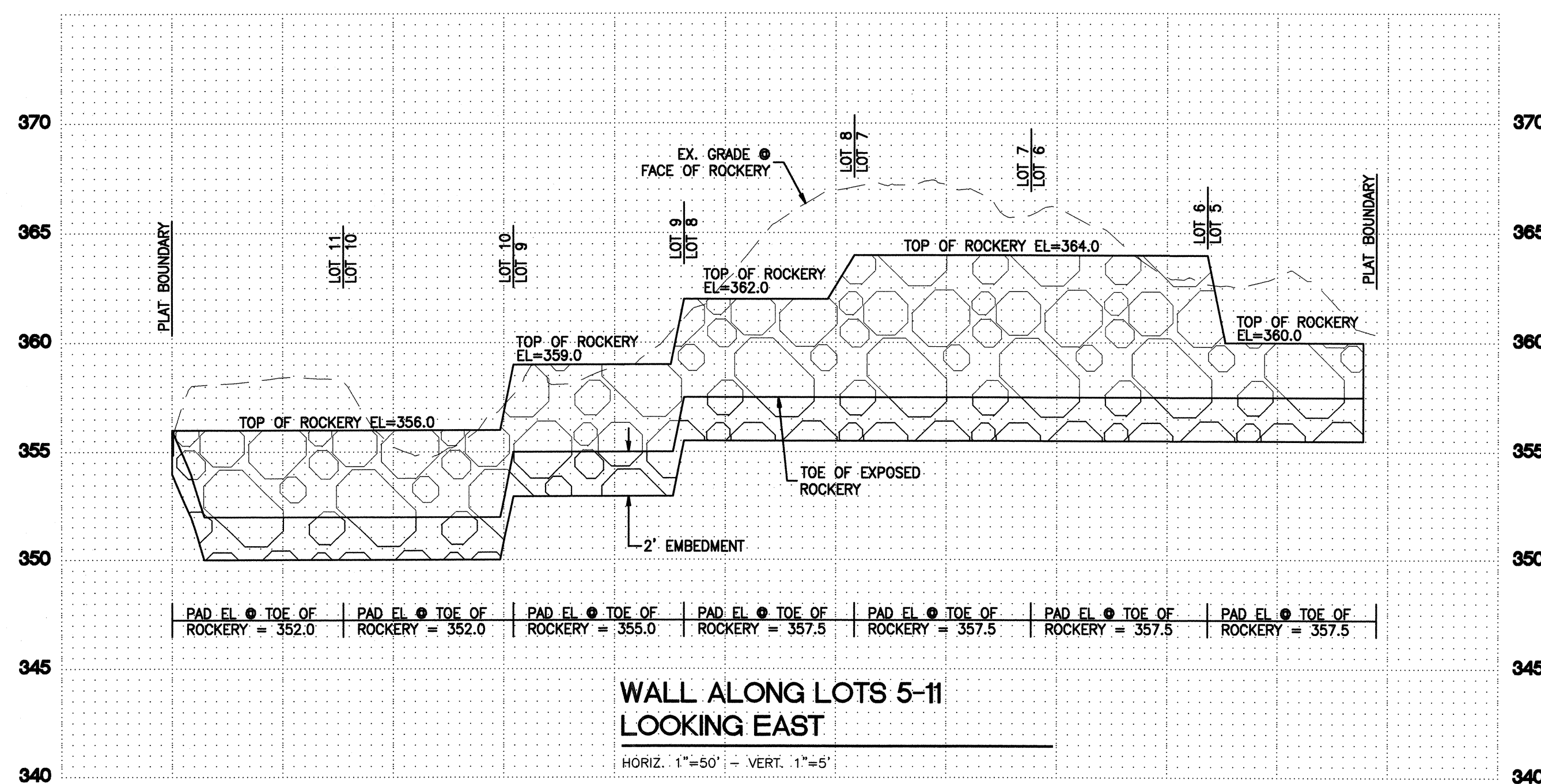
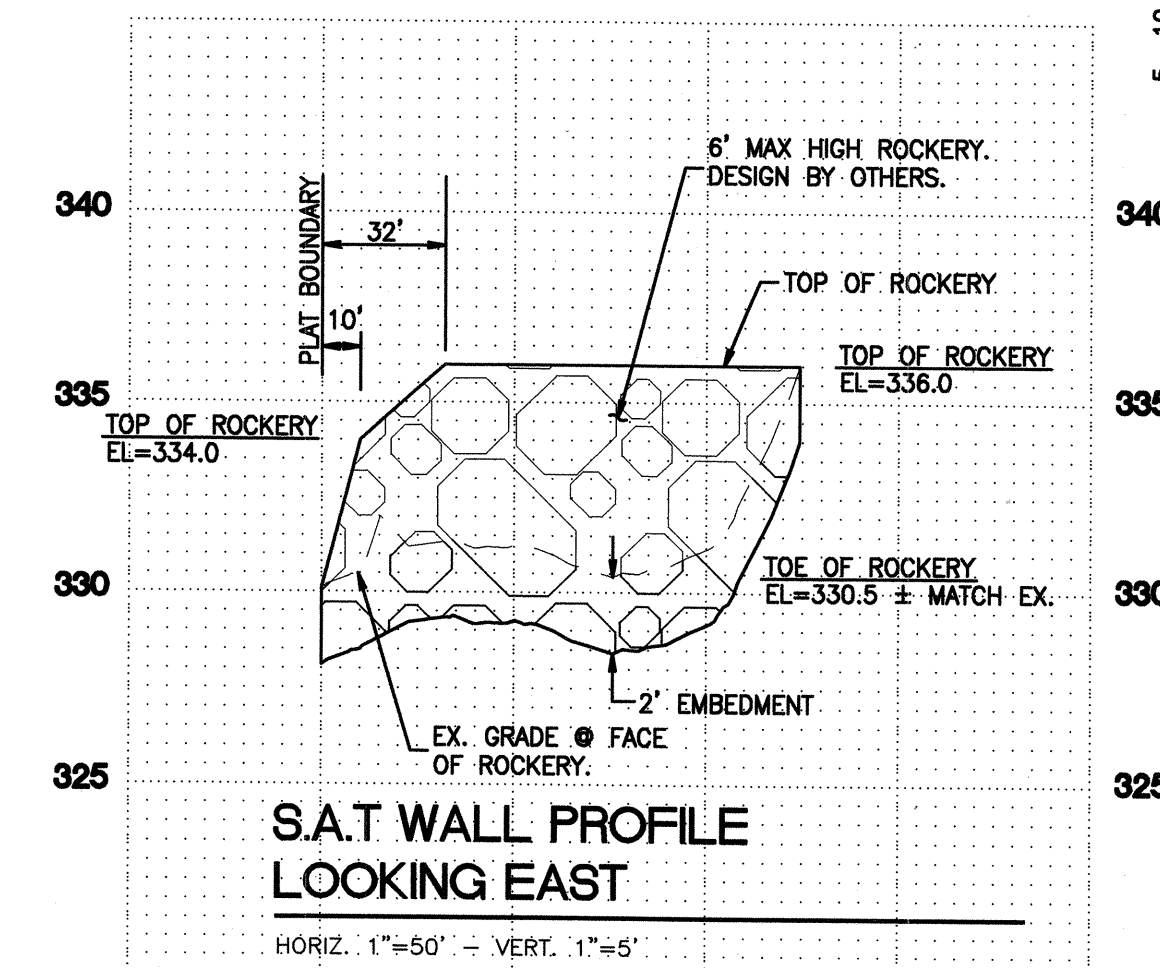
Job Number
10189
Sheet
4A of 9

A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



U = UPHILL PAD SECTION

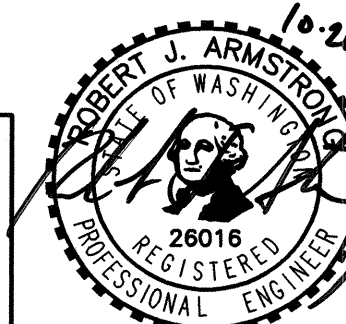
NOT TO SCALE



AS-BUILT

APPROVED BY:

DOUGLAS JACOBSON, P.E. DATE
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



Revision		Title	
No.	Date	By	Appr.
5	10/21/03	OUT	ASBUILT
4	11/06/02	BIT	REVISD BYPASS LINE
3	10/07/02	BIT	REVISD PER CITY REQUEST
2	9/24/02	BIT	REVISD PER CITY REQUEST
1	8/13/02	BIT	REVISD PER CITY REQUEST

Job Number	10189
Sheet	5A of 9
Job Title	B AND J DEVELOPMENT 2630 - 116TH AVENUE NE, SUITE 100 BELLEVUE, WA 98004 (425) 828-6424
Scale:	Horizontal 1"=50' Vertical N/A
Designed	BIT
Drawn	BIT
Checked	BIT
Approved	RAA
Date	3/27/02

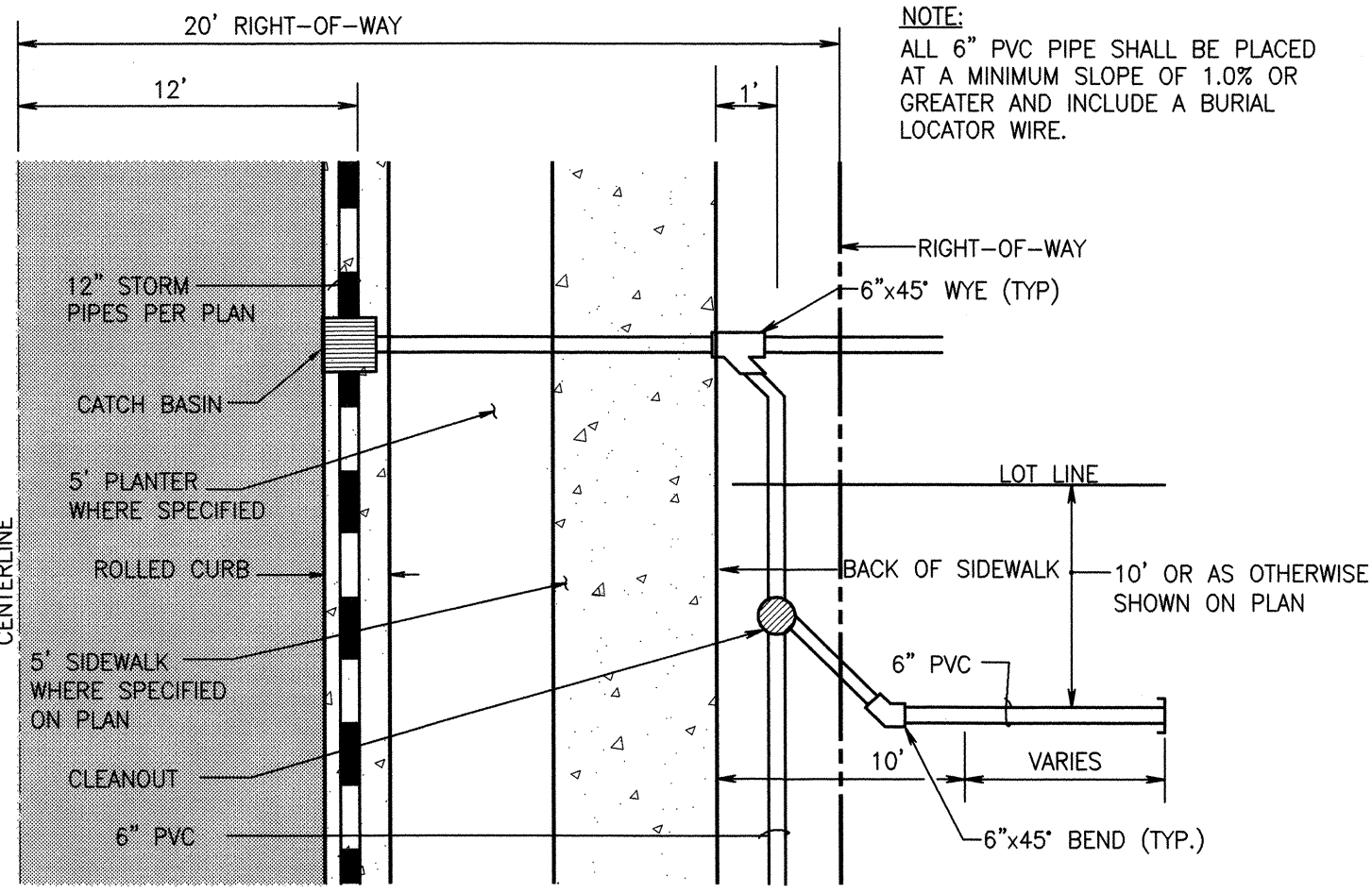
18215 72ND AVENUE SOUTH KENT, WA 98032 (425) 251-6222 (425) 251-8782 FAX CIVIL ENGINEERING, LAND PLANNING, SURVEYING, ENVIRONMENTAL SERVICES

26016 REGISTERED PROFESSIONAL ENGINEER STATE OF WASHINGTON DOUGLAS J. JACOBSON

EXPIRES 2/5/04

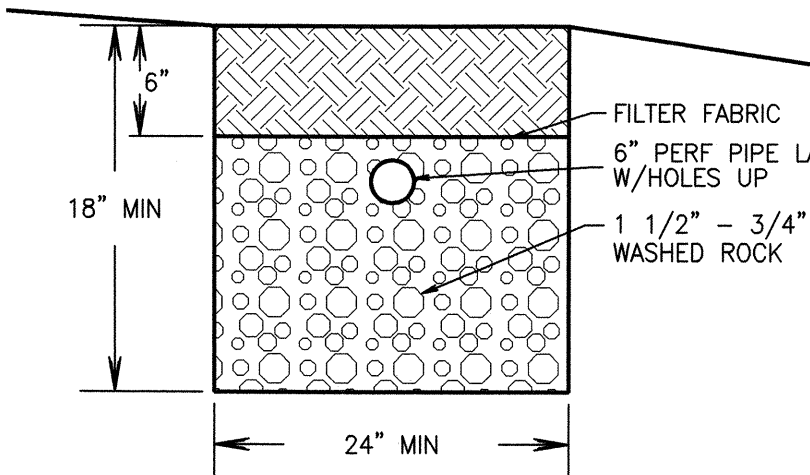
MILL CREEK GENERAL PLAN NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF MILL CREEK STANDARDS AND SPECIFICATIONS AND WASHINGTON STATE DEPARTMENT OF TRANSPORTATION 2002 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
- ALL WORK WITHIN THE SITE SHALL BE SUBJECT TO THE INSPECTION OF THE CITY ENGINEER OR HIS/HER DESIGNATED REPRESENTATIVE.
- PRIOR TO BEGINNING ROAD CONSTRUCTION, THE APPLICANT, HIS/HER ENGINEER AND ROAD CONTRACTOR SHALL MEET WITH THE DEPARTMENT OF PUBLIC WORKS FOR A PRE-CONSTRUCTION MEETING.
- A COPY OF THESE APPROVED PLANS MUST BE ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- PRIOR TO ANY SITE CONSTRUCTION TO INCLUDE CLEARING/LOGGING OR GRADING THE SITE/LOT CLEARING LIMITS SHALL BE LOCATED AND FILED IDENTIFIED BY THE PROJECT SURVEYOR/ENGINEER AS REQUIRED BY THESE PLANS AND APPROVED BY THE CITY.
- THE TEMPORARY EROSION/SEDIMENTATION CONTROL FACILITY SHALL BE CONSTRUCTED PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING IN ACCORDANCE WITH APPROVED TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED.
- TRENCH BACKFILL OF NEW UTILITIES AND STORM DRAINAGE FACILITIES SHALL BE COMPACTED TO 95 PERCENT MAXIMUM DENSITY (MODIFIED PROCTOR) UNDER ROADWAYS AND 90 PERCENT MAXIMUM DENSITY (MODIFIED PROCTOR) OFF ROADWAYS.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. UTILITIES SHOWN HERE ARE FOR THE PURPOSES OF ASSISTING THE CONTRACTOR IN LOCATING SAID UTILITIES. CONTRACTOR SHALL CONTACT UNDERGROUND UTILITIES LOCATION CENTER (1-800-424-5555) 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION AND OBTAIN ON-SITE UTILITIES LOCATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL OTHER NECESSARY PERMITS AND REQUIREMENTS BY THE CITY OF MILL CREEK GOVERNING AUTHORITY/AGENCY.
- DISTURBED SOILS SHALL BE HYDROSEEDING IF NOT WORKED WITHIN 30 DAYS.
- ALL RETAINING WALLS AND BUILDING FOUNDATIONS SHALL BE FOUNDED ON COMPETENT NATIVE SOIL AS RECOMMENDED IN THE GEOTECHNICAL STUDY. THE DESIGN OF ALL RETAINING WALLS OVER FOUR FEET IN HEIGHT AND ALL BUILDING FOUNDATIONS MUST BE APPROVED BY THE CITY BUILDING OFFICIAL PRIOR TO CONSTRUCTION.

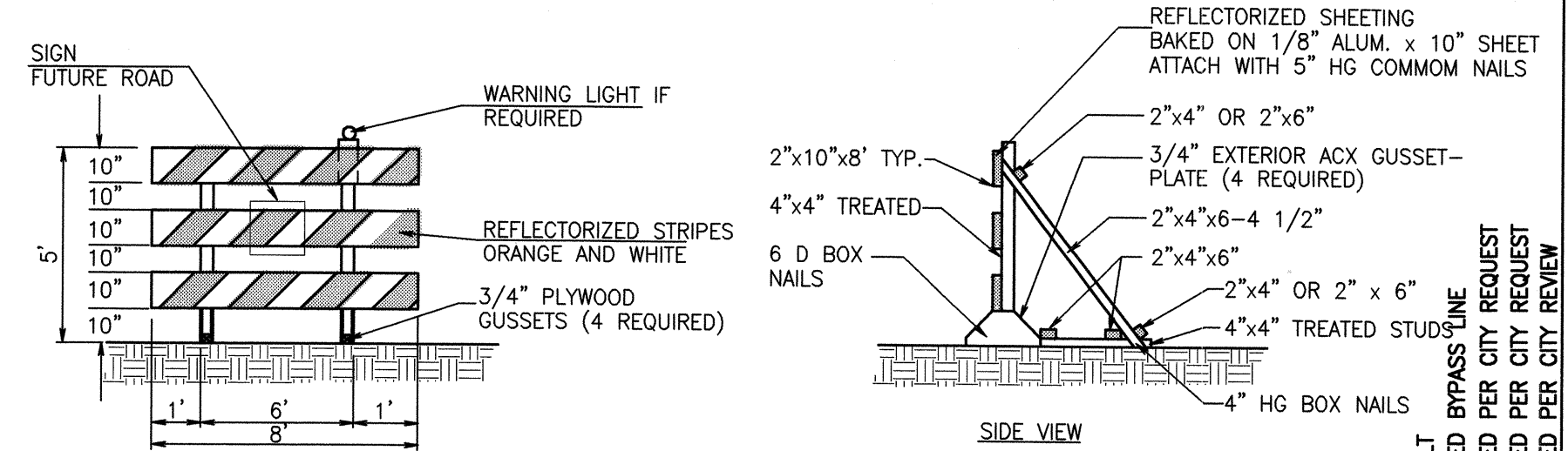


PLAN VIEW
N.T.S.
ROOF AND FOOTING DRAIN DETAIL
NOT TO SCALE

- NOTES:
- PERFORATED STUB-OUT CONNECTIONS SHALL CONSIST OF AT LEAST 10 FEET OF PERFORATED PIPE LAID IN A LEVEL 2 FOOT WIDE TRENCH BACKFILLED WITH WASHED DRAIN ROCK. THE DRAIN ROCK SHALL EXTEND TO A DEPTH OF AT LEAST 8 INCHES BELOW THE BOTTOM OF THE PIPE AND SHALL COVER THE PIPE. THE PIPE SHALL BE LAID LEVEL AND THE ROCK TRENCH SHALL BE COVERED WITH FILTER FABRIC AND 6" RANDOM FILL.
 - THE FOLLOWING NOTE CONDITIONING SINGLE FAMILY RESIDENTIAL BUILDING PERMITS ON COMPLIANCE WITH THE APPROVED STUB OUT SYSTEM SHALL BE RECORDED WITH THE FINAL PLAT:
"SINGLE FAMILY RESIDENCES CONSTRUCTED ON LOTS CREATED BY THIS SUBDIVISION MUST PROVIDE PERFORATED STUB-OUT CONNECTIONS PER DETAILS SHOWN ON SHEET 5 OF THE APPROVED ROAD AND DRAINAGE PLANS."



TRENCH X-SECTION
PLAN VIEW OF ROOF
NOT TO SCALE
PERFORATED STUB-OUT CONNECTION



- NOTES:
- BARRICADES SHALL BE INSTALLED IN ACCORDANCE WITH PART VI OF THE MUTCD OR BETTER.
 - LUMBER SHALL BE STANDARD GRADE OR BETTER.
 - RIGHT(R) BARRICADES ARE PLACED TO THE RIGHT OF TRAFFIC. LEFT(L) BARRICADES ARE PLACED TO THE LEFT OF TRAFFIC.
 - WHERE A BARRICADE(S) EXTENDS ENTIRELY ACROSS A ROADWAY, THE STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN IN DETOURING. WHERE BOTH RIGHT AND LEFT TURNS ARE PROVIDED, THE CHEVRON STRIPING SHALL SLOPE DOWNWARD IN BOTH DIRECTIONS FROM THE CENTER OF THE BARRICADE.

TYPE III BARRICADE
NOT TO SCALE

MILL CREEK STORM DRAINAGE NOTES

- ALL PIPE SHALL BE PLACED ON STABLE EARTH, OR IF IN THE OPINION OF THE CITY INSPECTOR, THE EXISTING FOUNDATION IS UNSATISFACTORY, THEN IT SHALL BE EXCAVATED BELOW GRADE AND BACKFILLED WITH A CITY APPROVED MATERIAL TO SUPPORT THE PIPE.
- THE BACKFILL SHALL BE PLACED EQUALLY IN BOTH SIDES OF THE PIPE OR PIPE-ARCH IN LAYERS WITH A LOOSE AVERAGE DEPTH OF 6 INCHES, MAXIMUM DEPTH 8 INCHES, THOROUGHLY TAMPING EACH LAYER. THESE COMPACTED LAYERS MUST EXTEND FOR ONE DIAMETER IN EACH SIDE OF THE PIPE OR TO THE SIDE OF THE TRENCH. MATERIALS TO COMPLETE THE FILL OVER PIPE SHALL BE THE SAME AS DESCRIBED. (REFER TO SPECIFICATION 2-03.3 (14) CM METHOD B AND C.
- ALL CATCH BASINS TO BE TYPE I UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL MANHOLE, INLET, AND CATCH BASIN FRAMED AND GRATES JUST PRIOR TO POURING OF CURBS AND PAVING.
- ALL CATCH BASINS WITH A DEPTH OVER 5.0 FEET TO THE FLOW LINE SHALL BE TYPE II CB (MANHOLE).
- ALL TYPE II CATCH BASIN MANHOLES AND ALL INLET AND CATCH BASINS OUTSIDE OF PUBLIC RIGHT-OF-WAY SHALL HAVE SOLID LOCKING LIDS UNLESS OTHERWISE APPROVED BY THE CITY.
- STANDARD LADDER STEPS SHALL BE PROVIDED IN ALL CATCH BASINS/MANHOLES EXTENDING 5 FEET IN DEPTH.
- CATCH BASIN FRAME AND GRATES SHALL BE DUCTILE IRON (H20 RATING) VANED GRATE (OLYMPIC FOUNDRY ITEM NO. SM50VG OR APPROVED EQUAL). THROUGH CURB CATCH BASIN SHALL BE 18- BY 24-INCH DUCTILE IRON-DIAGONAL SLOT GRATE WITH 9-INCH-HIGH DIAMOND PLATE HOOD, AND H20 RATING (OLYMPIC FOUNDRY ITEM NO. SM50VG OR APPROVED EQUAL).
- PRIOR TO SIDEWALK CONSTRUCTION, CONSTRUCT THE LOT DRAINAGE AND STUB OUTS AND/OR BEHIND SIDEWALK DRAINS AS REQUIRED. POSITIVE DRAINAGE IS TO BE PROVIDED WHERE FEASIBLE WITH CONNECTION TO STORM DRAIN. STUB-OUTS SHALL BE MARKED WITH 2-INCH BY 4-INCH AND LABELED "STORM."
- STORMWATER RETENTION/DETENTION FACILITIES STORM DRAINAGE PIPE AND CATCH BASINS SHALL BE JETTED AND CLEANED PRIOR TO ACCEPTANCE.
- PIPE SPECIFICATIONS: PIPE MATERIAL, JOINTS, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH WSDOT/APWA STANDARD SPECIFICATIONS, SECTION 9.05 AND AASHTO AND ASTM DESIGNATIONS AS NOTED BELOW.

MATERIALS ALLOWED FOR STORM DRAIN LINES:

PLAIN CONCRETE PIPE (CP)
REINFORCED CONCRETE PIPE (RCP)
ALUMINUM SPIRAL RI PIPE (ASRP)
ASTM D3034 PVC
RIBBED PVC
HDPE - HIGH DENSITY POLYETHYLENE PIPE (OUTSIDE PUBLIC RIGHT-OF-WAY ONLY)

MATERIALS ALLOWED FOR 6-INCH ROOF DRAIN LINES:

ASTM D3034 PVC
SDR35

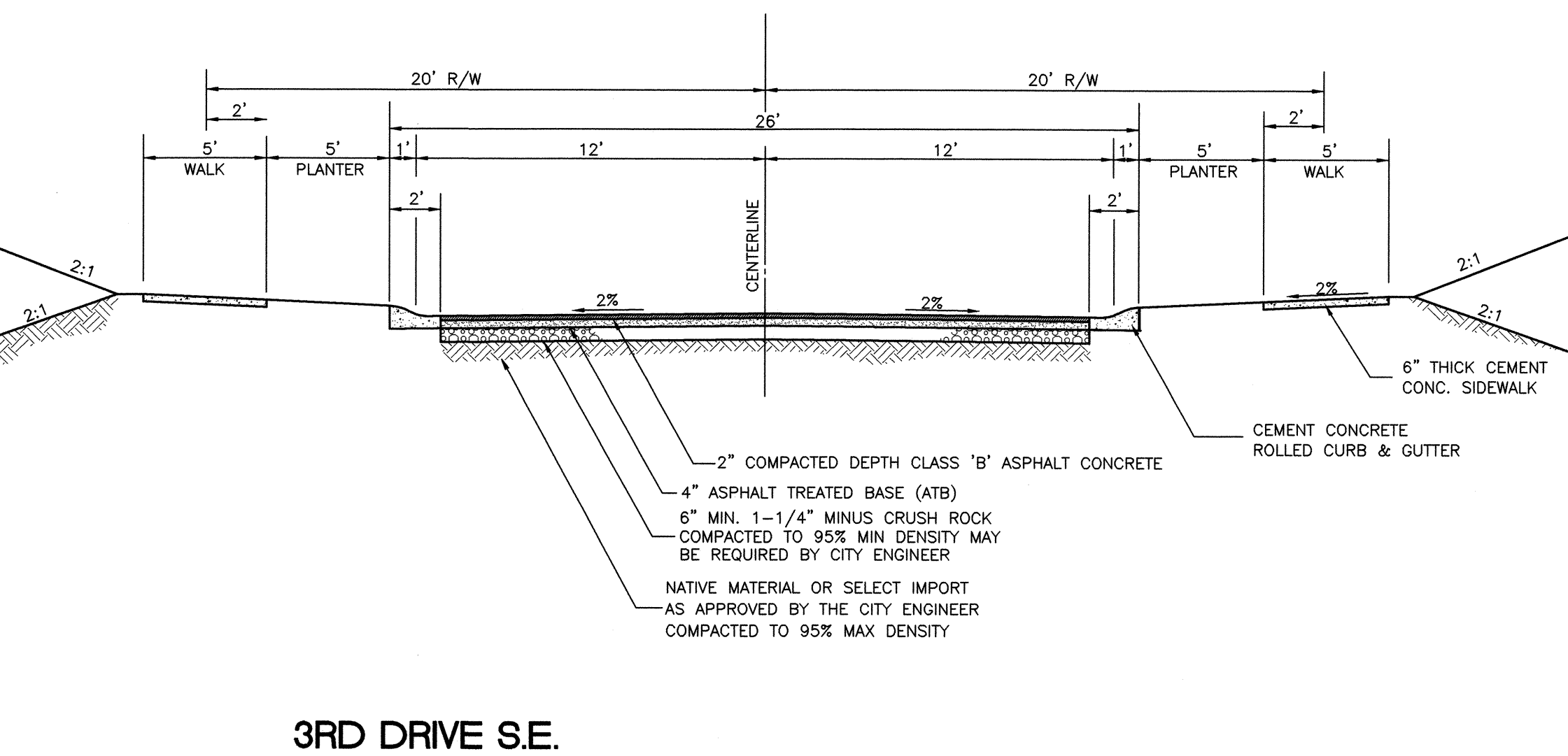
ALLOWABLE JOINTS:

CONCRETE PIPE SHALL BE RUBBER GASKETED
SPIRAL RIB PIPE SHALL BE "HAT BANDED" WITH NEOPRENE GASKETS
PVC PIPE SHALL BE RUBBER GASKETED

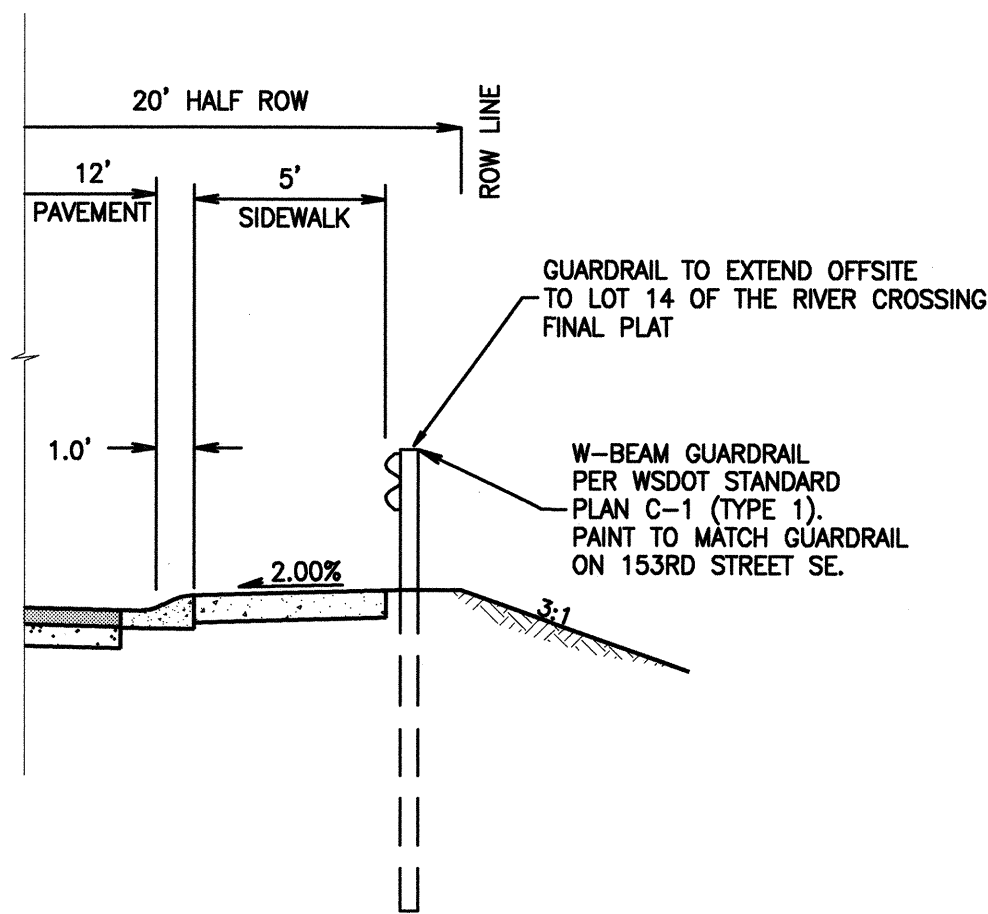
OPERATIONS AND MAINTENANCE

THE STORM DRAINAGE SYSTEM CONSISTS OF CATCH BASINS WITH SUMPS, AND INTERCONNECTING STORM DRAIN PIPES THAT TIE INTO AN EXISTING CONVEYANCE SYSTEM THAT EVENTUALLY DRAINS TO AN EXISTING DETENTION/WATER QUALITY POND. A LISTING OF THE MAINTENANCE REQUIREMENTS FOR THE STORM DRAIN SYSTEM IS LISTED BELOW.

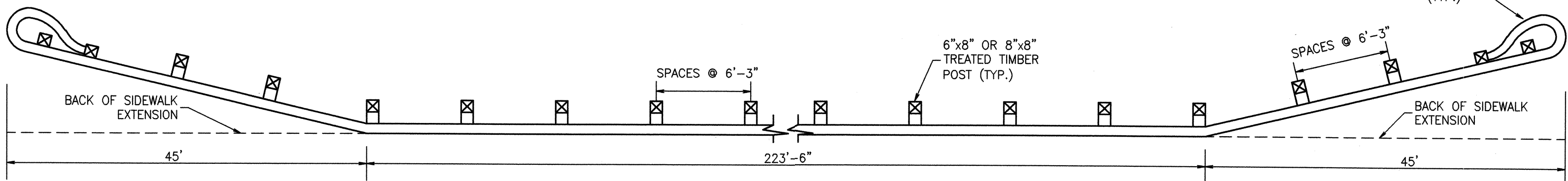
- THE MAINTENANCE OF THE STORM DRAIN SYSTEM OUTSIDE THE RIGHT-OF-WAY SHALL BE THE RESPONSIBILITY OF THE HOMEOWNER'S ASSOCIATION FOR THE RIVER CROSSING NORTH DEVELOPMENT. THE DETENTION POND THAT IS SHARED BY THE MILL CREEK TOWN CENTER, RIVER CROSSING, AND RIVER CROSSING NORTH DEVELOPMENT IS TO BE MAINTAINED BY THE MILL CREEK TOWN CENTER.
- THE MAINTENANCE OF THE STORM DRAIN SYSTEMS WITHIN THE PRIVATE STORM DRAINAGE EASEMENTS SHALL BE THE RESPONSIBILITY OF THE HOMEOWNER'S ASSOCIATION FOR THE RIVER CROSSING NORTH DEVELOPMENT.
- THE CATCH BASIN GRATES SHALL BE CHECKED MONTHLY AND TRASH AND DEBRIS SHALL BE REMOVED.
- THE CATCH BASIN SUMPS SHALL BE CLEANED ANNUALLY.



3RD DRIVE S.E.
NOT TO SCALE



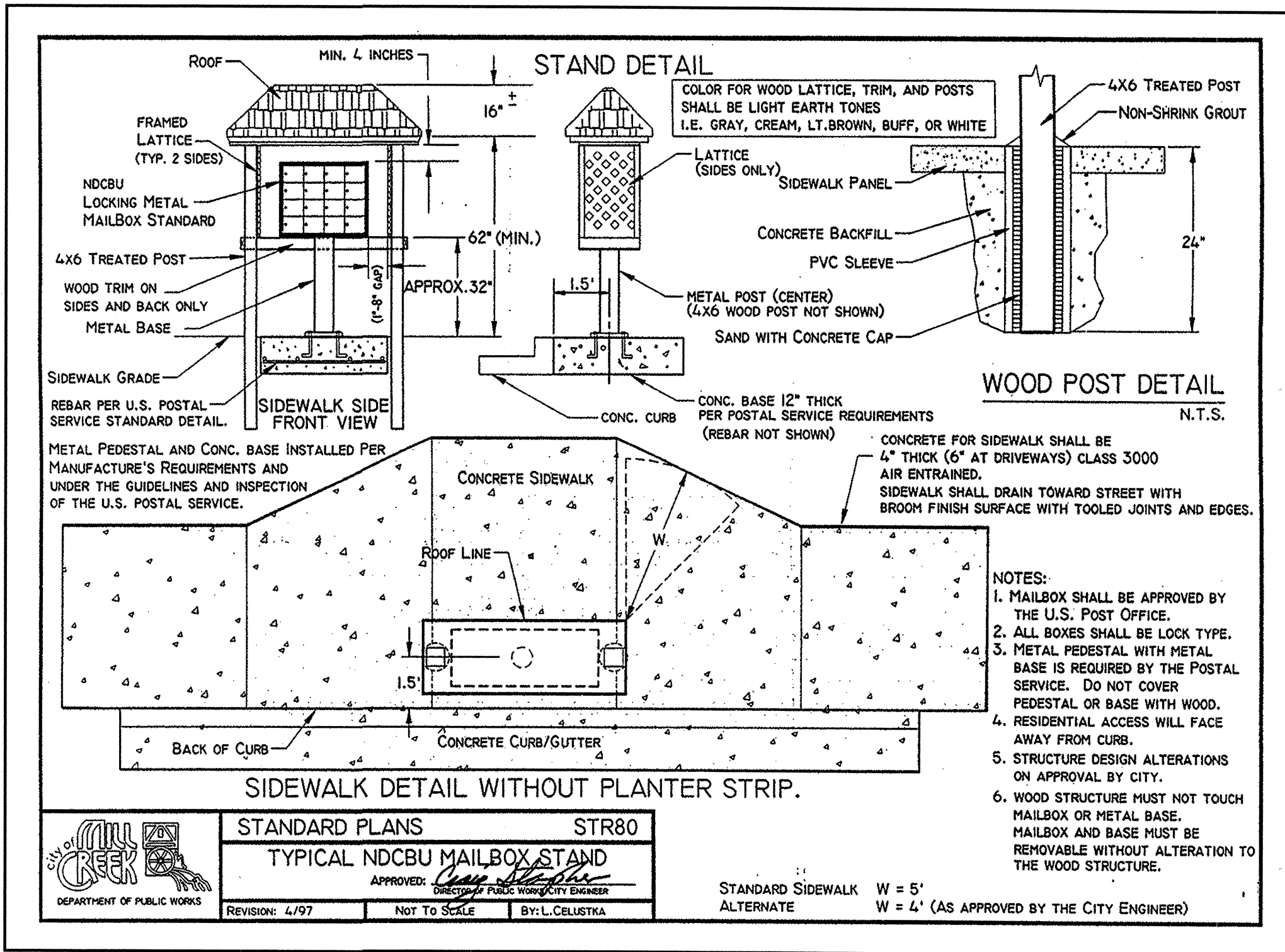
3RD DRIVE S.E. (STA. 10+00 TO STA. 12+10)
GUARD RAIL SECTION
NOT TO SCALE



- NOTES:
- POST SPACING IS 6'-3" UNLESS OTHERWISE SHOWN.
 - FLARE RATE FOR POSTED SPEED: 9:1 40MPH OR LESS

GUARDRAIL PLACEMENT

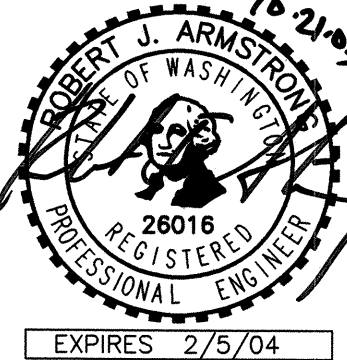
NOT TO SCALE WSDOT STANDARD PLAN C-2



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APPROVED BY:

DOUGLAS JACOBSON, P.E.
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



ROAD AND DRAINAGE NOTES
AND DETAILS

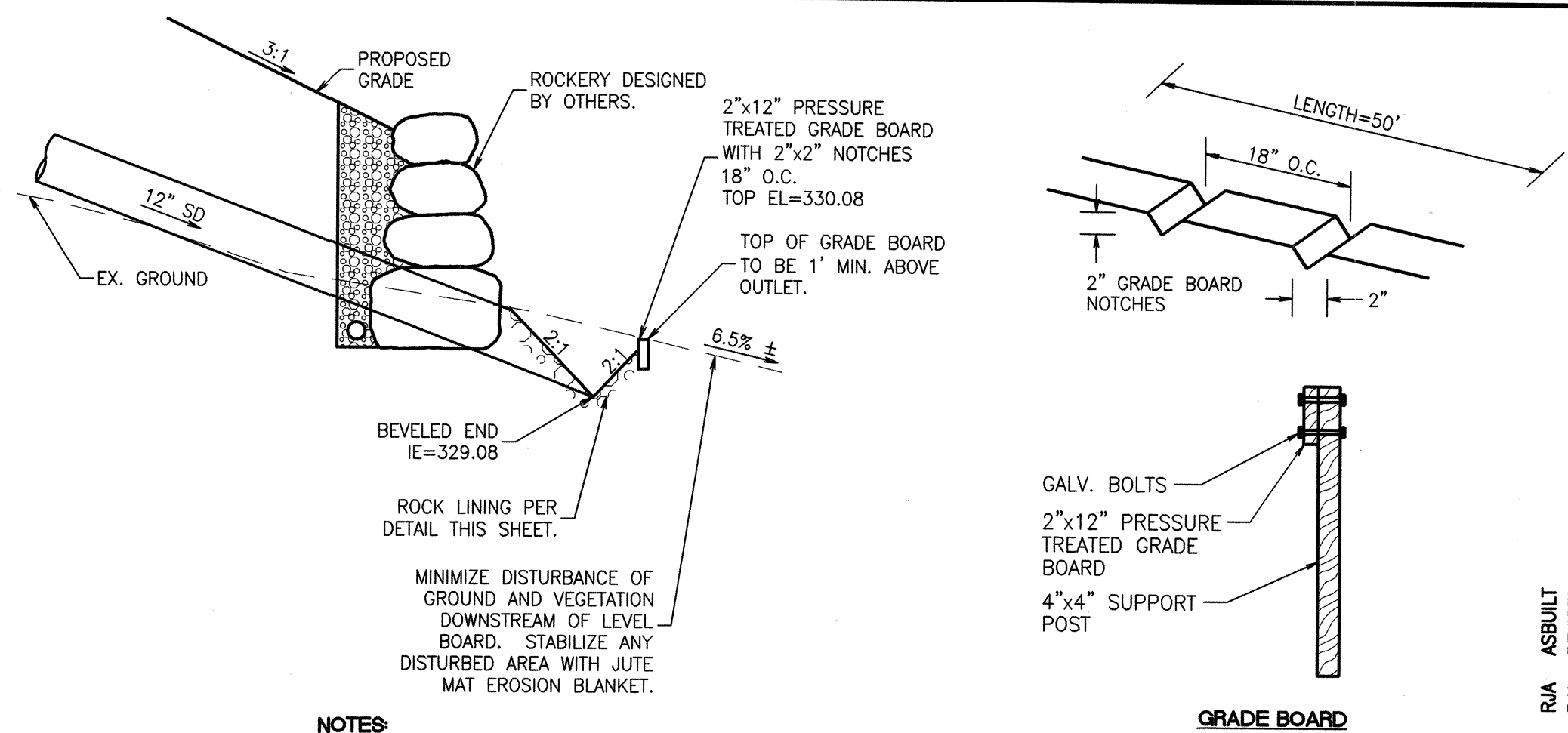
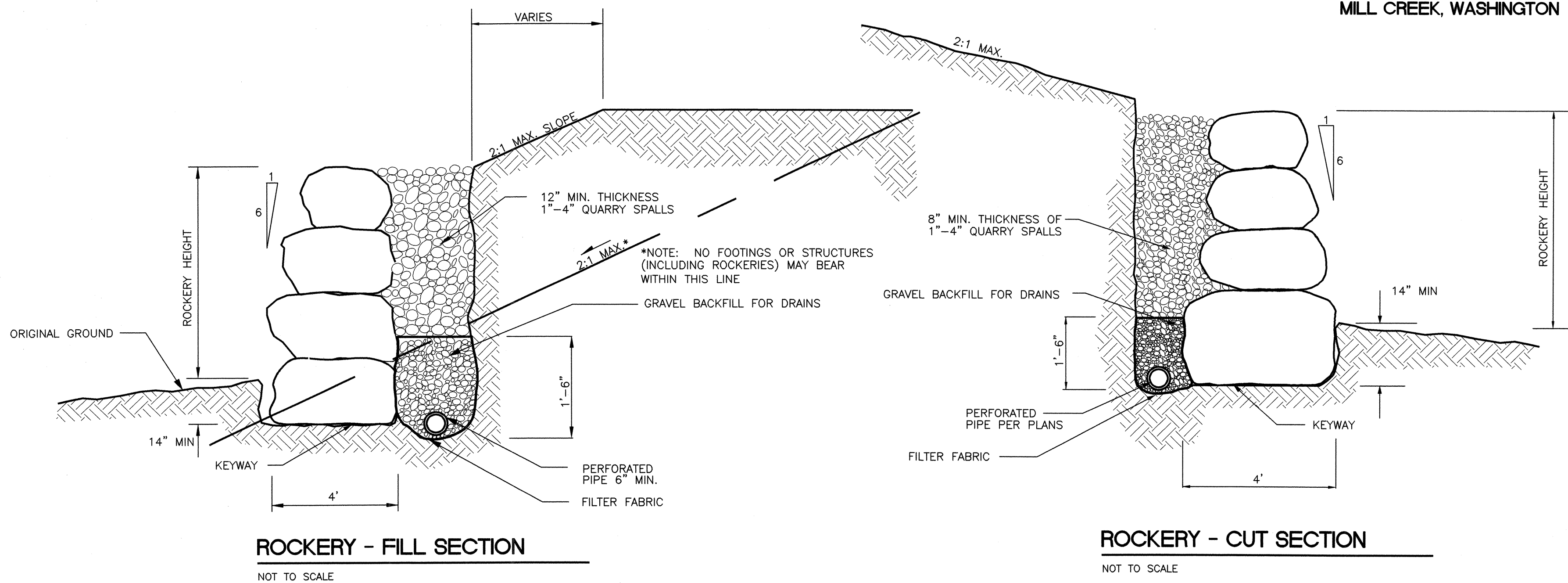
For:
B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING,
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Job Number
10189
Sheet
6A of 9

A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



NOTES:

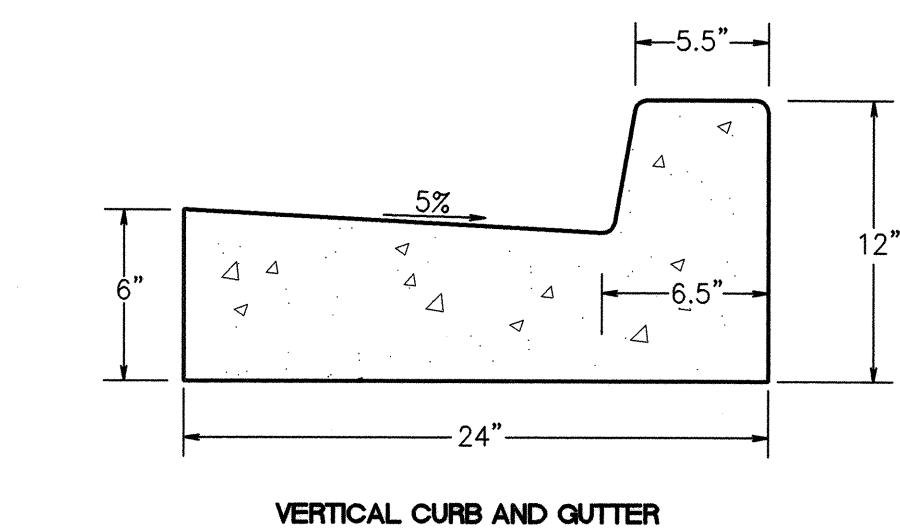
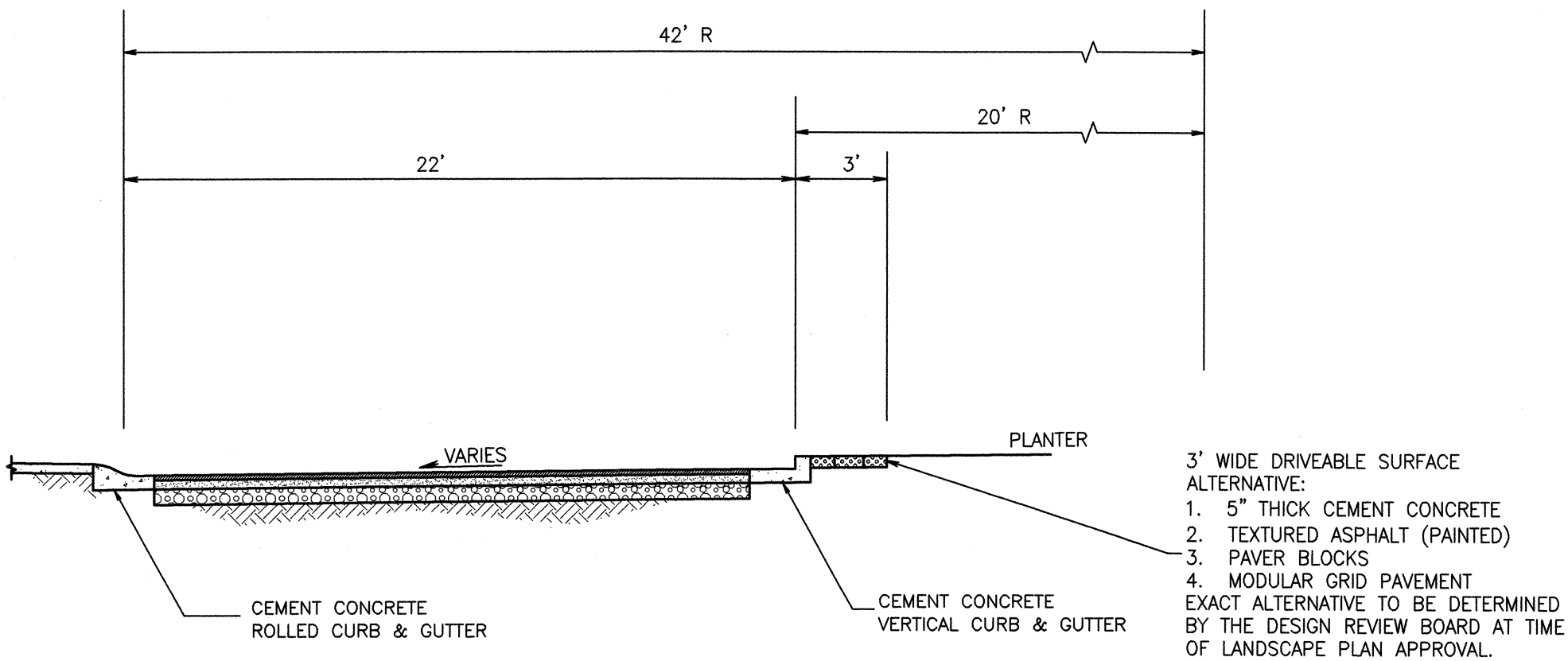
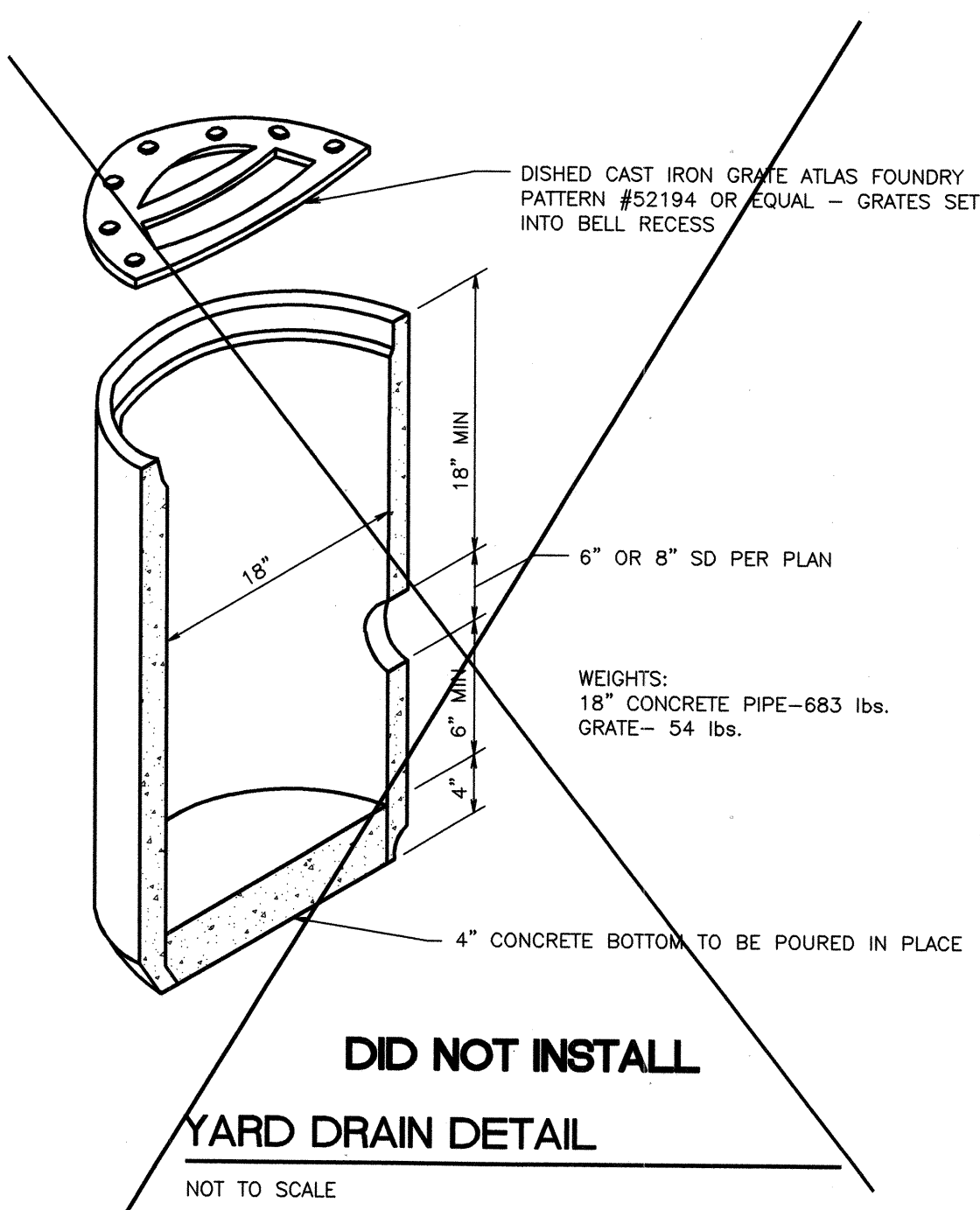
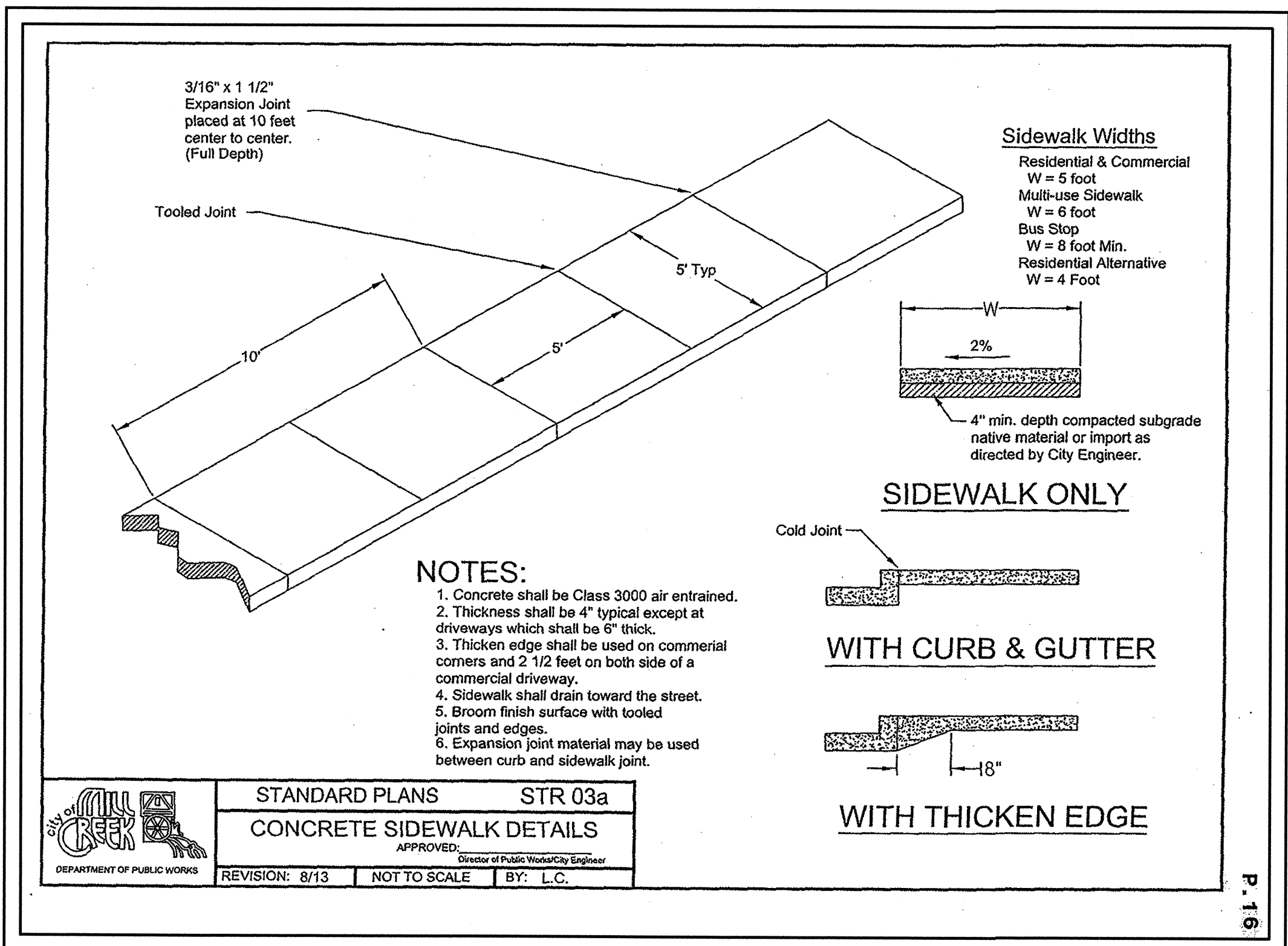
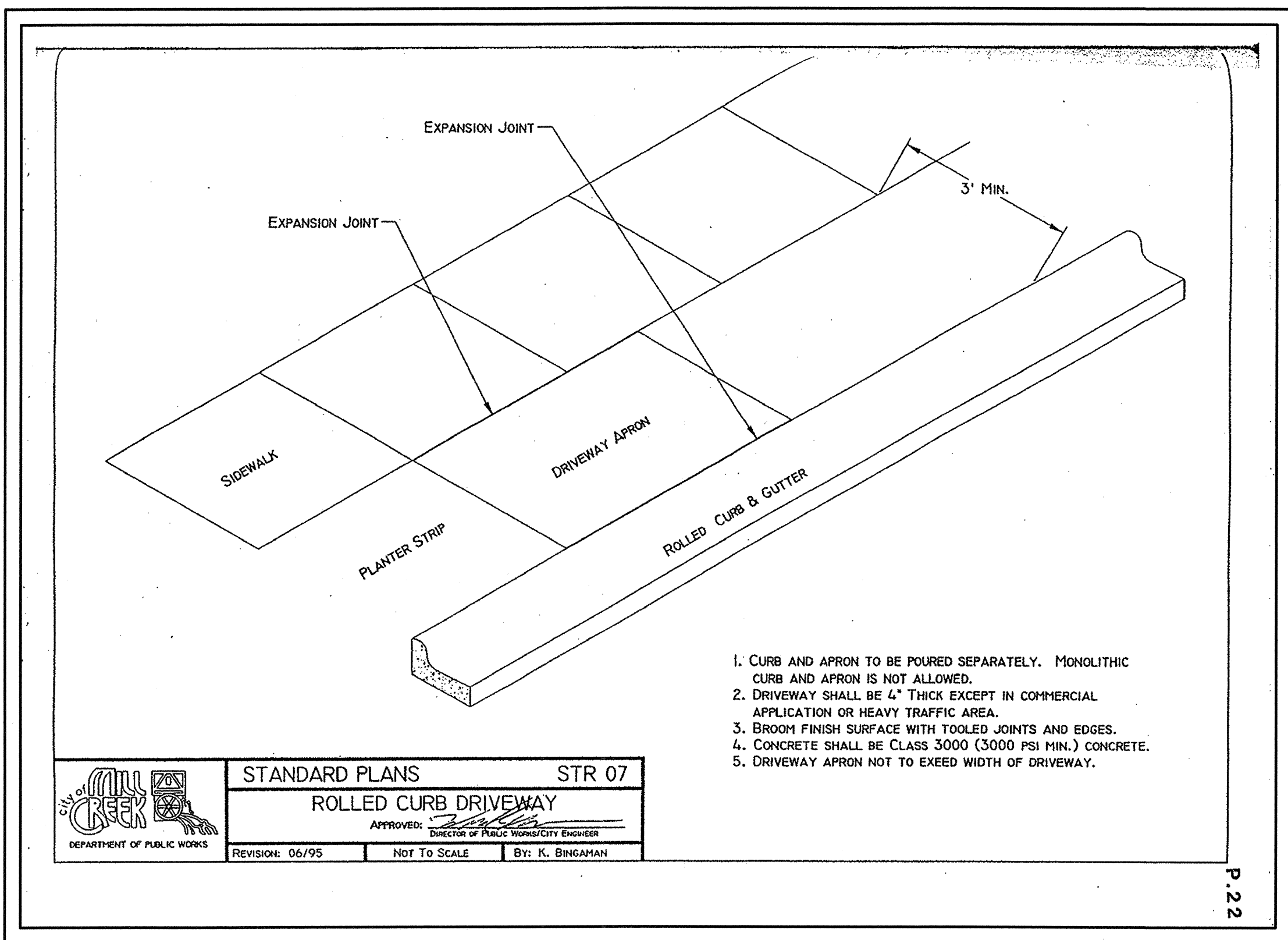
1. THIS TRENCH SHALL BE CONSTRUCTED SO AS TO PREVENT POINT DISCHARGE AND/OR EROSION.
2. GRADE BOARD TO BE 50' MINIMUM IN LENGTH.
3. TRENCH AND GRADE BOARD MUST BE LEVEL, ALIGN TO FOLLOW CONTOURS OFF SITE.
4. GRADE BOARD SUPPORT POST SPACING AS REQUIRED BY SOIL CONDITIONS.

RIP RAP SPECIFICATIONS:
ROCK LINING SHALL BE QUARRY SPALLS WITH GRADATION AS FOLLOWS:
PASSING 8-INCH SQUARE SIEVE: 100%
PASSING 3-INCH SQUARE SIEVE: 40-60% MAXIMUM
PASSING 3/4-INCH SQUARE SIEVE: 0-10% MAXIMUM

Rev.	Date	By	Chk.	Appr.	Revision
5	10/21/03	CJT	BT	ASBULT	REVISION PER CITY REQUEST
4	11/08/02	BT	BT	BT	REVISION PER CITY REQUEST
3	10/11/02	BT	BT	BT	REVISION PER CITY REQUEST
2	9/24/02	BT	BT	BT	REVISION PER CITY REQUEST
1	8/13/02	BT	BT	BT	REVISION PER CITY REQUEST

MISCELLANEOUS NOTES AND DETAILS

RIVER CROSSING NORTH

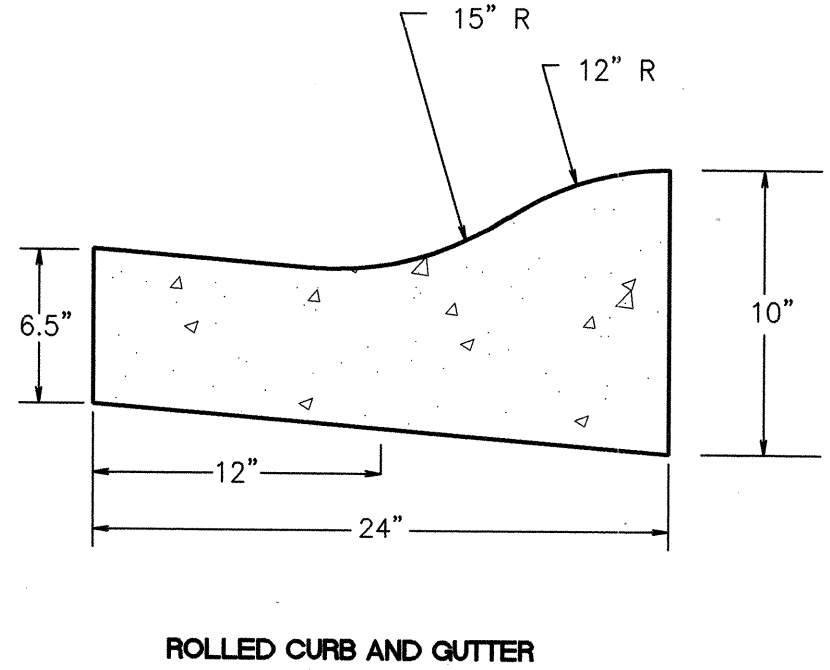


PLACEMENT

VERTICAL CURB & GUTTER SHALL BE PLACED ON MAJOR AND MINOR ARTERIALS, COLLECTOR STREETS AND AT PUBLIC FACILITIES (PARKS).
ROLLED CURB AND GUTTER SHALL BE PLACED ON ALL RESIDENTIAL STREETS.

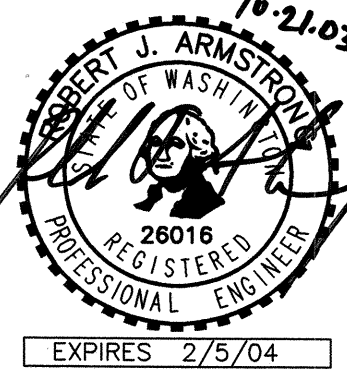
NOTES:

1. CEMENT CONCRETE SHALL BE CLASS 3000 AIR ENTRAINED.
2. IN-SITU NATIVE MATERIAL MAY BE USED IF APPROVED BY THE CITY ENGINEER. ALTERNATIVE BASE SHALL BE CSTC CRUSH ROCK WITH A MINIMUM DEPTH OF 4 INCH.
3. STEEL FORMS SHALL BE USED ON ALL STRAIGHT SECTIONS. WOOD BENDER BOARD SHALL BE USED ON RADIUS.
4. EXPANSION JOINTS SHALL BE PLACED AT 10 FEET CENTER TO CENTER, AT THE TOP OF EACH DRIVEWAY, AT TOP OF ACCESS RAMPS, AND ON BOTH SIDES OF A STORM BASIN.
5. FINISH SHALL BE BROOMED WITH TOOLED EDGES.
6. ALL EXPANSION JOINTS SHALL BE FULL DEPTH.



AS-BUILT

APPROVED BY: _____
DOUGLAS JACOBSON, P.E. DATE
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



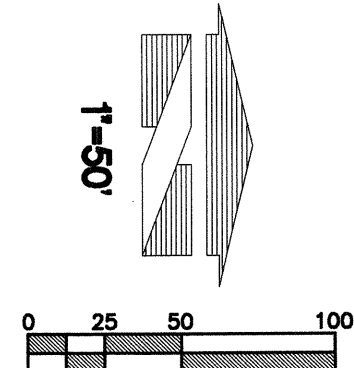
For: **B AND J DEVELOPMENT**
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

Scale:	Horizontal	Vertical
AS SHOWN	AS SHOWN	N/A

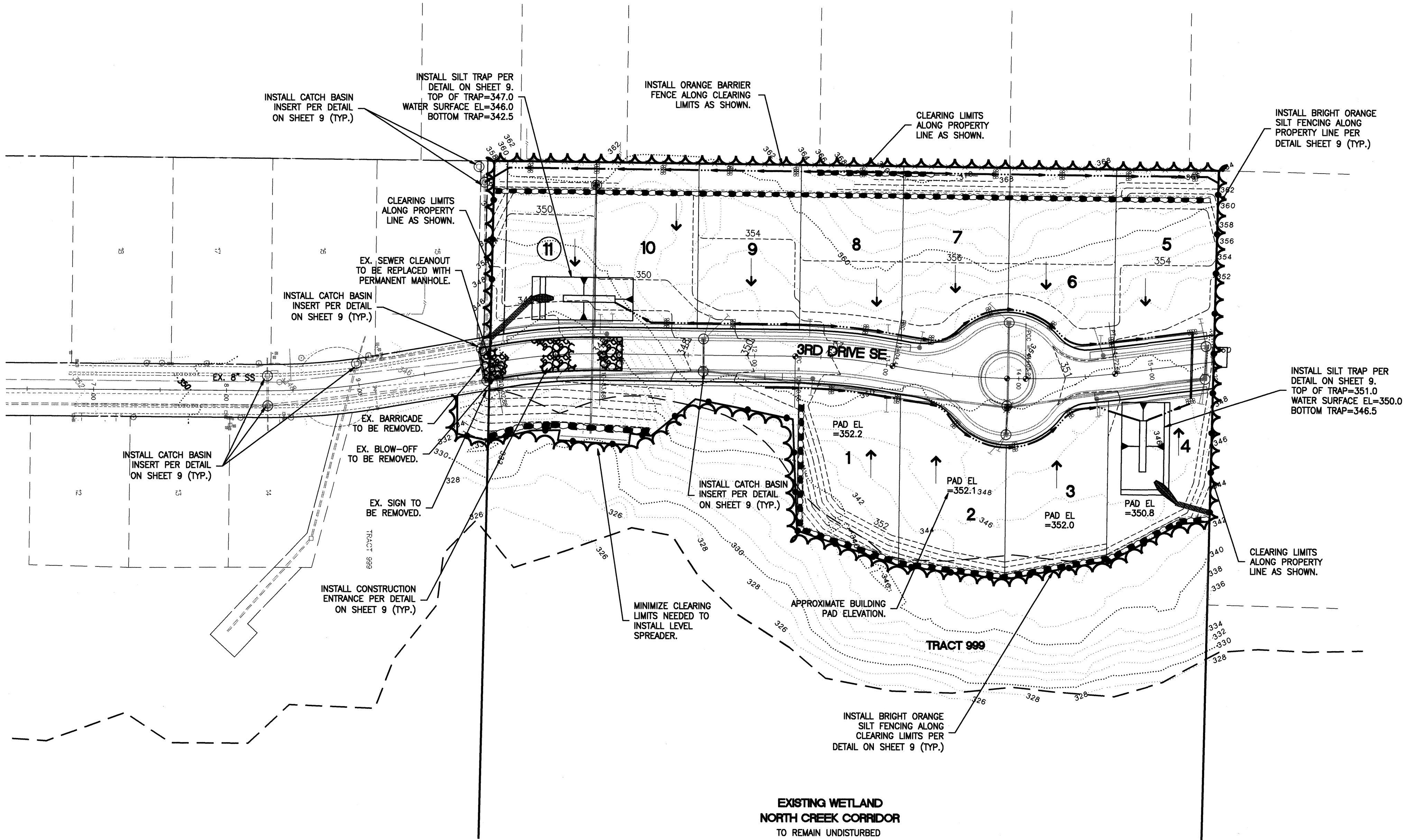
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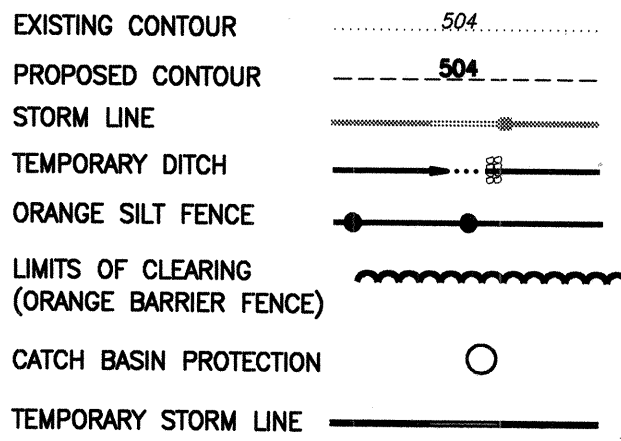
Job Number	10189	Sheet	7A of 9
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A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M.
MILL CREEK, WASHINGTON



LEGEND



SITE GRADING AND T.E.S.C. NOTES

- ALL GRADING SHALL COMPLY TO CHAPTER 70 OF THE UNIFORM BUILDING CODE, TITLE 17, AND SPECIAL CONDITIONS AS DIRECTED BY CITY OF MILL CREEK AT PRECON MEETING.
- T.E.S.C. MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE WORK (SEE ATTACHED DETAILED DRAINAGE PLAN). TENSAR SAFETY FENCE AT CLEARING LIMITS WILL BE INSTALLED PRIOR TO ANY SITE WORK OR CLEARING.
- PUBLIC STREETS ARE TO BE KEPT CLEAR OF DIRT AND DEBRIS DURING OPERATIONS, PER R.O.W. PERMIT.
- THE TEMPORARY EROSION/SEDIMENTATION CONTROL FACILITY SHALL BE CONSTRUCTED PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING IN ACCORDANCE WITH THE APPROVED TEMPORARY EROSION/SEDIMENTATION CONTROL PLAN. THESE FACILITIES MUST BE SATISFACTORILY MAINTAINED UNTIL CONSTRUCTION AND LANDSCAPING IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED.
- NONCOMPLIANCE WITH THE EROSION CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS AND/OR CLEARING LIMITS MAY RESULT IN REVOCATION OF PROJECT PERMITS, PLAN APPROVAL AND BOND FORECLOSURES.
- CONSTRUCTION ACCEPTANCE WILL BE SUBJECT TO A WELL ESTABLISHED GROUND COVER THAT FULFILLS THE REQUIREMENT OF THE APPROVED CONSTRUCTION PLANS AND THE CITY OF MILL CREEK STANDARDS.
- ALL AREAS TO BE SEEDED SHALL BE CULTIVATED TO THE SATISFACTION OF THE CITY INSPECTOR. THIS MAY BE ACCOMPLISHED BY DISCING, RAKING, HARROWING OR OTHER ACCEPTABLE MEANS. PERFORM ALL CULTURAL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE SLOPE. IF NECESSARY, SURFACE RUNOFF CONTROL MEASURES SUCH AS GRADIENT TERRACES, INTERCEPTOR DIKE/SWALES, LEVEL SPREADERS, AND SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO SEEDING.
- ALL DISTURBED AREAS SUCH AS RETENTION FACILITIES, ROADWAY BACK SLOPES, ETC., SHALL BE SEEDED WITH A PERENNIAL GROUND COVER GRASS TO MINIMIZE EROSION. GRASS SEEDING WILL BE DONE USING AN APPROVED HYDROSEEDER OR AS OTHERWISE APPROVED BY THE CITY OF MILL CREEK.

CONSTRUCTION SEQUENCE

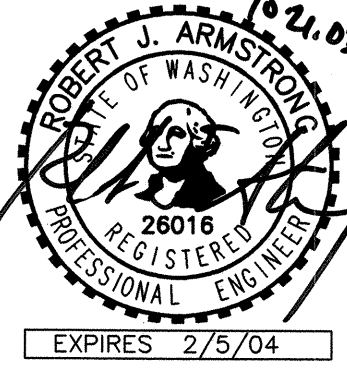
- SCHEDULE AND ATTEND PRE-CONSTRUCTION MEETING WITH THE SITE INSPECTOR
- FLAG ALL CLEARING LIMITS (CALL FOR CITY INSPECTION), AND INSTALL BARRIER FENCE
- INSTALL ORANGE SILT FENCES PER THESE PLANS, CALL FOR CITY INSPECTION.
- POST SIGN WITH NAME AND PHONE NUMBER OF TESC SUPERVISOR PER DETAIL SHEET 9.
- PROVIDE CATCH BASIN PROTECTION ON ALL EXISTING CATCH BASINS WHICH MIGHT BE EFFECTED BY GRADING OPERATIONS.
- GRADE AND INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
- CONSTRUCT PERMANENT AND TEMPORARY SEDIMENT PONDS AND TRAPS. SURFACE WATER CONTROLS MUST BE INSTALLED AND FUNCTIONAL BEFORE GRUBBING CAN OCCUR.
- CLEAR, GRADE, AND STABILIZE ROADS. INSTALL ROADWAY STABILIZATION SUCH AS GRAVEL BASE OR SPALLS. AMEND EROSION AND SEDIMENT FACILITIES AS NEEDED.
- CONSTRUCT SURFACE WATER CONTROLS INCLUDING TEMPORARY DITCHES, ROCK CHECK DAMS AND TEMPORARY CULVERTS. SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
- MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH MILL CREEK STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- RELOCATE SURFACE WATER CONTROLS AND EROSION CONTROL MEASURES OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE EROSION AND SEDIMENT CONTROL IS ALWAYS IN ACCORDANCE WITH THE MILL CREEK EROSION AND SEDIMENT CONTROL STANDARDS.
- COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH HYDROSEEDING, STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING OR EQUIVALENT.
- STABILIZE ALL AREAS THAT REACH FINAL GRADE WITHIN SEVEN DAYS.
- SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
- COMPLETE FINAL GRADING WHILE MAINTAINING CATCH BASIN PROTECTION.
- UPON COMPLETION OF THE PROJECT, ALL DISTURBED AREAS MUST BE STABILIZED AND BMP'S REMOVED IF APPROPRIATE.

SPECIAL NOTES

- THE INTENT OF THE GRADING PLAN IS TO BALANCE CUTS AND FILLS ONSITE. EXCESS MATERIAL FROM EXCAVATION TO BE SPREAD ON LOTS.
- ALTERNATE ORANGE SILT FENCE MAY BE USED TO REPLACE THE COMBINATION OF SILT FENCE AND NOPE FENCE.
- ALL STRUCTURAL FILL SHALL BE PLACED UNDER FULL-TIME SUPERVISION OF THE GEOTECHNICAL ENGINEER, AND ADEQUATE COMPACTION TESTING SHALL BE PERFORMED TO SUBSTANTIATE THE SUITABILITY OF THE FILL FOR BUILDING CONSTRUCTION. PRIOR TO BOND RELEASE, PERMITTEE SHALL SUBMIT VERIFICATION THAT SOIL COMPACTION REQUIREMENT HAS BEEN SATISFIED.

AS-BUILT

APPROVED BY: _____
DOUGLAS JACOBSON, P.E. DATE _____
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



Job Number 10189
Sheet 8A of 9
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KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING,
SURVEYING, ENVIRONMENTAL SERVICES

For: B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

Title: GRADING, EROSION, AND SEDIMENT
CONTROL PLAN
RIVER CROSSING NORTH

Revision				
No.	Date	By	Chk.	Appr.
5	10/21/03	CMT	BIT	RIA
4	11/08/02	BIT	BIT	RIA
3	11/09/02	BIT	BIT	RIA
2	9/24/02	BIT	BIT	RIA
1	8/13/02	BIT	BIT	RIA

ROCK PROTECTION AT OUTFALLS

DISCHARGE VELOCITY AT DESIGN FLOW IN FEET PER SECOND (FPS)	REQUIRED PROTECTION MINIMUM DIMENSIONS				
	TYPE	THICKNESS	WIDTH	LENGTH	HEIGHT
0-5	ROCK LINING ⁽¹⁾	1 FOOT	DIAMETER + 6 FEET	8 FEET OR 4 x DIAMETER, WHICHEVER IS GREATER	CROWN + 1 FOOT
5 ⁺ -10	RIPRAP ⁽²⁾	2 FEET	DIAMETER + 6 FEET OR 3 x DIAMETER, WHICHEVER IS GREATER	12 FEET OR 4 x DIAMETER, WHICHEVER IS GREATER	CROWN + 1 FOOT
10 ⁺ -20	GABION OUTFALL	AS REQUIRED	AS REQUIRED	AS REQUIRED	CROWN + 1 FOOT
20 ⁺	ENGINEERED ENERGY DISSIPATER REQUIRED				

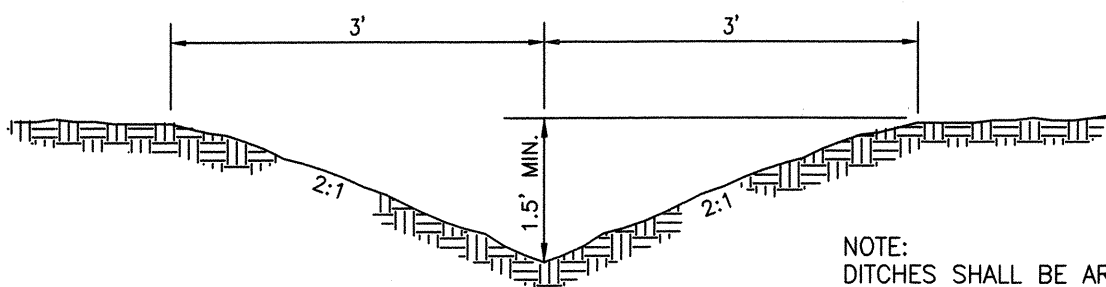
(1) ROCK LINING SHALL BE QUARRY SPALLS WITH GRADATION AS FOLLOWS:

PASSING 8-INCH SQUARE SIEVE: 100%
PASSING 3-INCH SQUARE SIEVE: 40-60% MAXIMUM
PASSING 3/4-INCH SQUARE SIEVE: 0-10% MAXIMUM

(2) RIPRAP SHALL BE REASONABLY WELL GRADED WITH GRADATION AS FOLLOWS:

MAXIMUM STONE SIZE: 24 INCHES (NOMINAL DIAMETER)
MEDIAN STONE SIZE: 16 INCHES
MINIMUM STONE SIZE: 4 INCHES

NOTE: RIPRAP SIZING GOVERNED BY SIDE SLOPES ON OUTLET CHANNEL IS ASSUMED TO BE APPROXIMATELY 3:1.

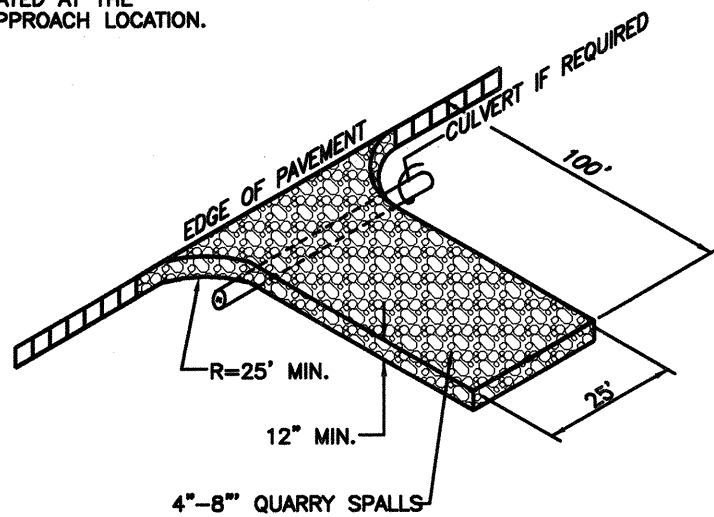


TEMPORARY 'V' DITCH

NOT TO SCALE

NOTES:

- CONTRACTOR'S RESPONSIBILITY FOR MAINTAINING AND CLEANING THE APPROACH ON A REGULAR BASIS.
- IF DIRECTED BY THE CITY, ADDITIONAL QUARRY SPALLS MUST BE ADDED.
- THE CONSTRUCTION APPROACH MUST BE LOCATED AT THE PERMANENT APPROACH LOCATION.



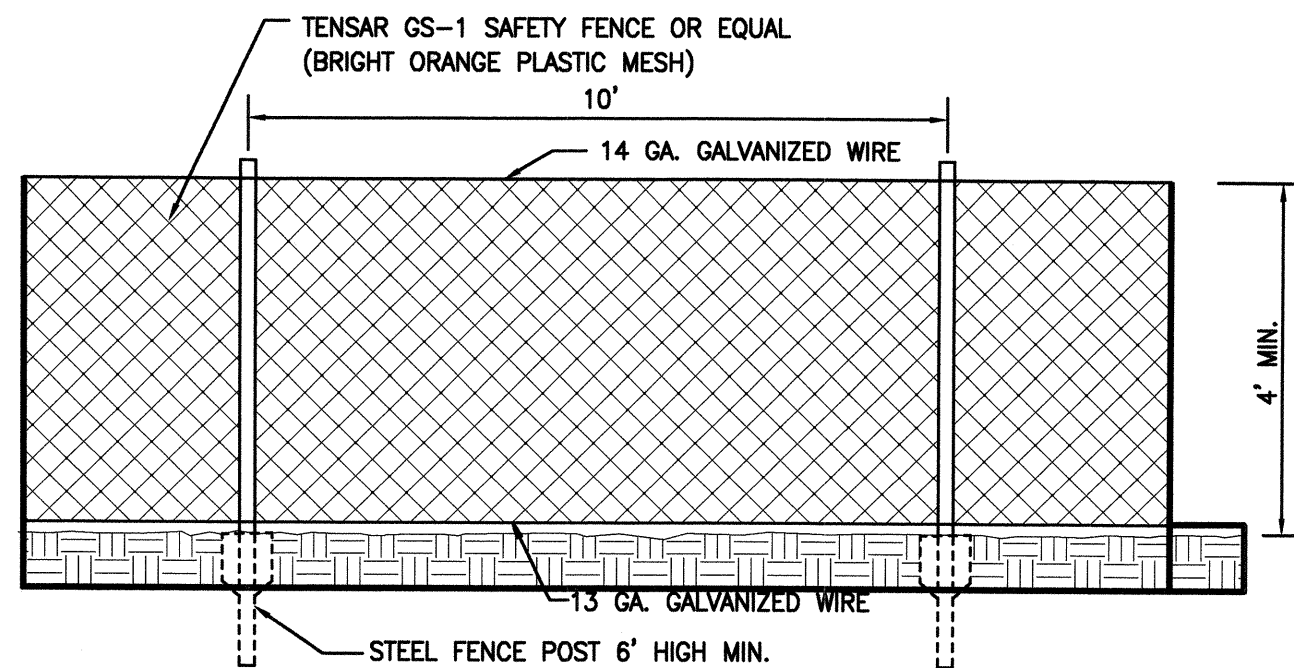
TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

BEST MANAGEMENT PRACTICES (BMP) ALTERNATIVES

MULCH MATERIAL	QUALITY STANDARDS	APPLICATION /1000 SF	APPLICATION /ACRE	DEPTH OF APPLICATION	REMARKS
GRAVEL, SLAG, OR CRUSHED STONE	WASHED, 3/4"-1-1/2" SIZE		9 CU YDS	3 INCHES	FOR SHORT SLOPES AND AROUND WOODY PLANTS & ORNAMENTALS USE WHERE SUBJECT TO FOOT TRAFFIC. APPROX. 2000 LBS/CU YD.
HAY OR STRAW	AIR DRIED, FREE FROM UNWANTED SEEDS & COARSE MATERIAL	75-100LBS OR 2-3 BALES	1-1/2 TO 2-1/2 TONS OR 90-120 BALES	MINIMUM OF 2 IN DEPTH, GREATER ON STEEP AREAS OR NEAR PROTECTED AREAS	USE WHERE THE MULCHING EFFECT IS TO BE MAINTAINED FOR LESS THAN 3 MONTHS. ANCHOR BY CRIMPING, COVERING WITH NETTING SPRAYING WITH TACKIFIER AND/OR KEPT MOIST.
PLASTIC SHEETING	MINIMUM 8-MIL THICKNESS				ANCHOR WITH SANDBAGS OR TIRES ON 10-FOOT GRID IN ALL DIRECTIONS. OVERLAP EDGES.
JUTE MAT, WOVEN STRAW BLANKET, SYNTHETIC FIBER BLANKET	N/A	N/A			USE ON STEEP SLOPES GREATER THAN 2:1 IN ADDITION TO HYDROSEED OR WOOD FIBER WITH TACKIFIER.
WOOD FIBER CELLULOSE (PARTIALLY DIGESTED WOOD FIBERS)	DYED GREEN SHOULD NOT CONTAIN GROWTH INHIBITING FACTORS	25-30 LBS.	1000-1500LBS		IF USED ON CRITICAL AREAS, OR STEEP SLOPES, DOUBLE THE NORMAL APPLICATION RATE. APPLY W/HYDROMULCHER. NO TE-DOWN REQUIRED.
WOOD FIBER APPLIED WITH HYDROSEEDING OR ALONE		1.25 TONS PER ACRE;			USE 90 GAL/ACRE TACKIFIER FOR STEEP SLOPES LESS THAN 2:1; 120 GAL/ACRE FOR STEEPER THAN 2:1
BARK CHIPS				MIN. OF 2 IN. DEPTH	DO NOT USE ON SLOPES STEEPER THAN 6%
WOOD CHIPS (HOG FUEL)	TREAT WITH 12LBS NITROGEN FERTILIZER/TON			MIN. OF 2 IN. DEPTH	DO NOT USE ON SLOPES STEEPER THAN 15%
HYDROSEED	USE MIX RECOMMENDED ABOVE				USE DOT SLOPE MIX FOR STEEP SLOPES.

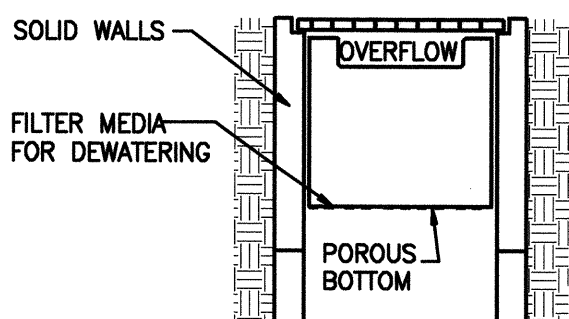
A PORTION OF SECTION 6, TOWNSHIP 27 N., RANGE 5 E., W.M. MILL CREEK, WASHINGTON



- NOTE:
1. CLIP FENCE TO GALVANIZED WIRE @ 5 FOOT ON-CENTER SPACING
2. WIRE FENCE TO STEEL FENCE POST

ORANGE BARRIER FENCE DETAIL

NOT TO SCALE



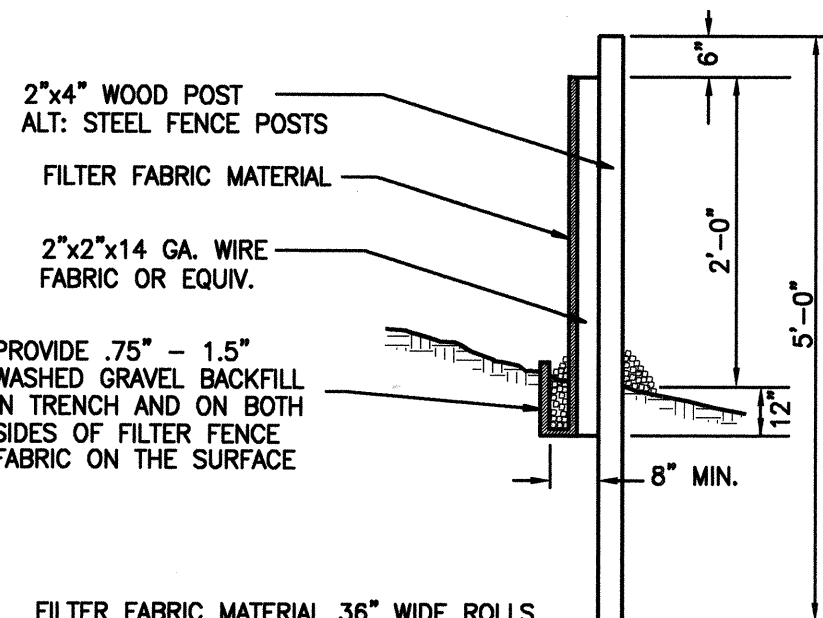
CATCH BASIN INSERT (MANUFACTURED)

MAINTENANCE STANDARDS

- ANY ACCUMULATED SEDIMENT ON OR AROUND THE FILTER FABRIC PROTECTION SHALL BE REMOVED IMMEDIATELY. SEDIMENT SHALL NOT BE REMOVED WITH WATER, AND ALL SEDIMENT MUST BE DISPOSED OF AS FILL ON-SITE OR HAULED OFF-SITE.
- ANY SEDIMENT IN THE CATCH BASIN INSERT SHALL BE REMOVED WHEN THE SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE. THE FILTER MEDIA FOR THE INSERT SHALL BE CLEANED OR REPLACED AT LEAST MONTHLY.
- REGULAR MAINTENANCE IS CRITICAL FOR BOTH FORMS OF CATCH BASIN PROTECTION. UNLIKE MANY FORMS OF PROTECTION THAT FAIL GRADUALLY, CATCH BASIN PROTECTION WILL FAIL SUDDENLY AND COMPLETELY IF NOT MAINTAINED PROPERLY.

CATCH BASIN PROTECTION

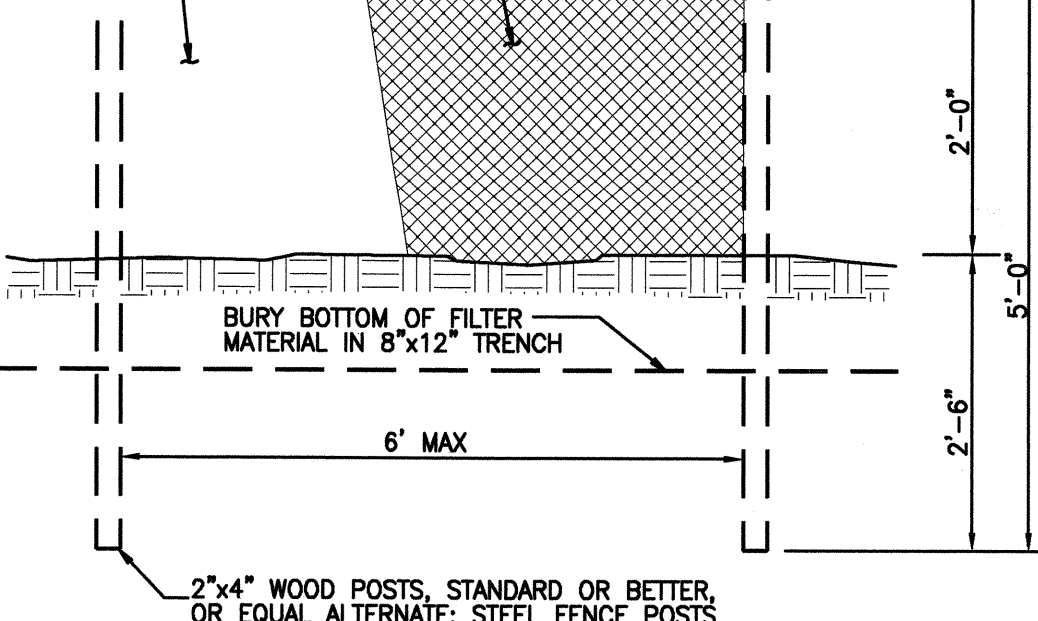
NOT TO SCALE



PROVIDE .75" - 1.5" WASHED GRAVEL BACKFILL IN TRENCH AND ON BOTH SIDES OF FILTER FABRIC. PROVIDE 36\"/>

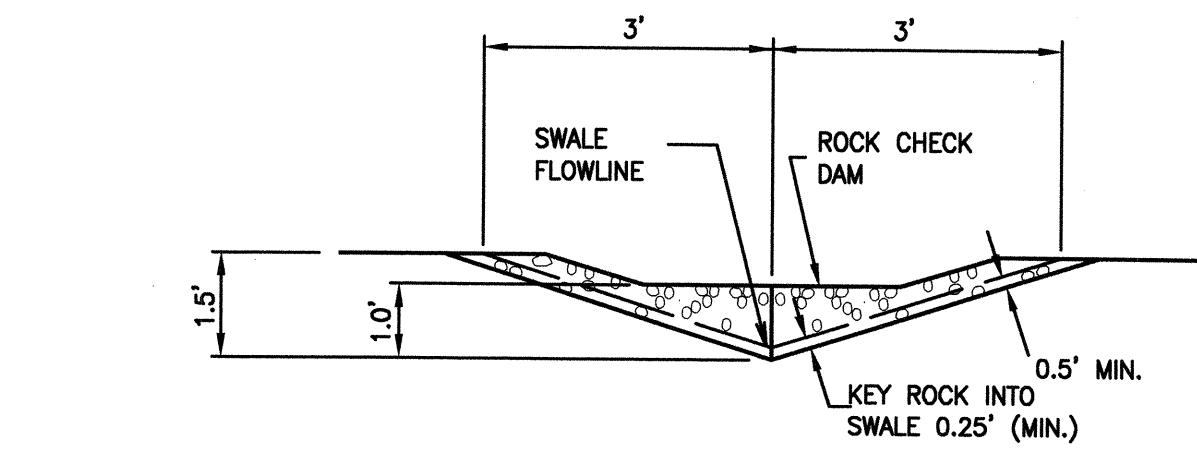
2'x2"x14 GA. WIRE FABRIC OR EQUIV.

2'x4" WOOD POST, STANDARD OR BETTER, OR EQUAL ALTERNATE: STEEL FENCE POSTS

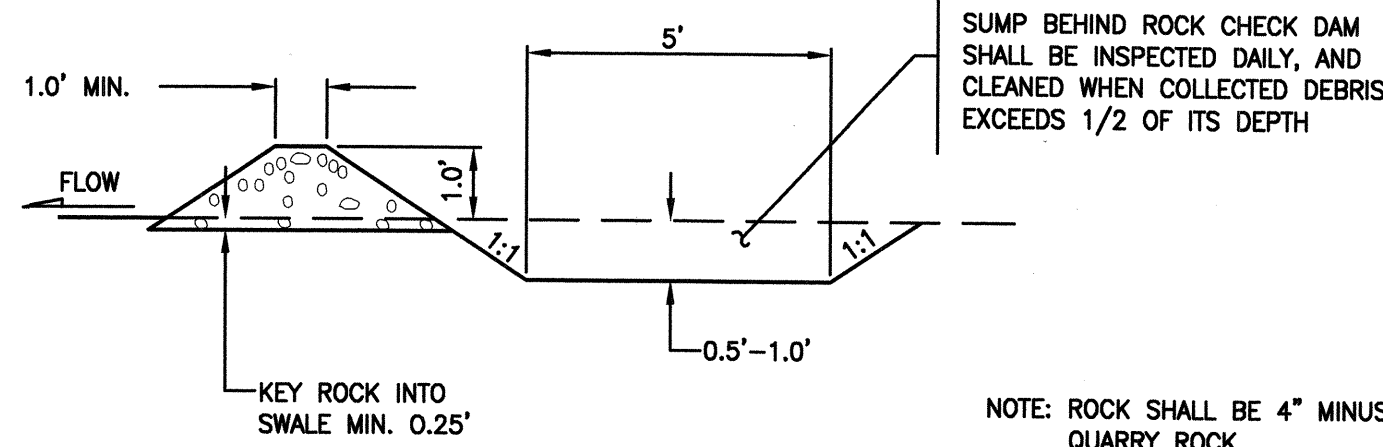


SILT FENCE DETAIL

NOT TO SCALE



SWALE X-SECTION AT ROCK CHECK DAM

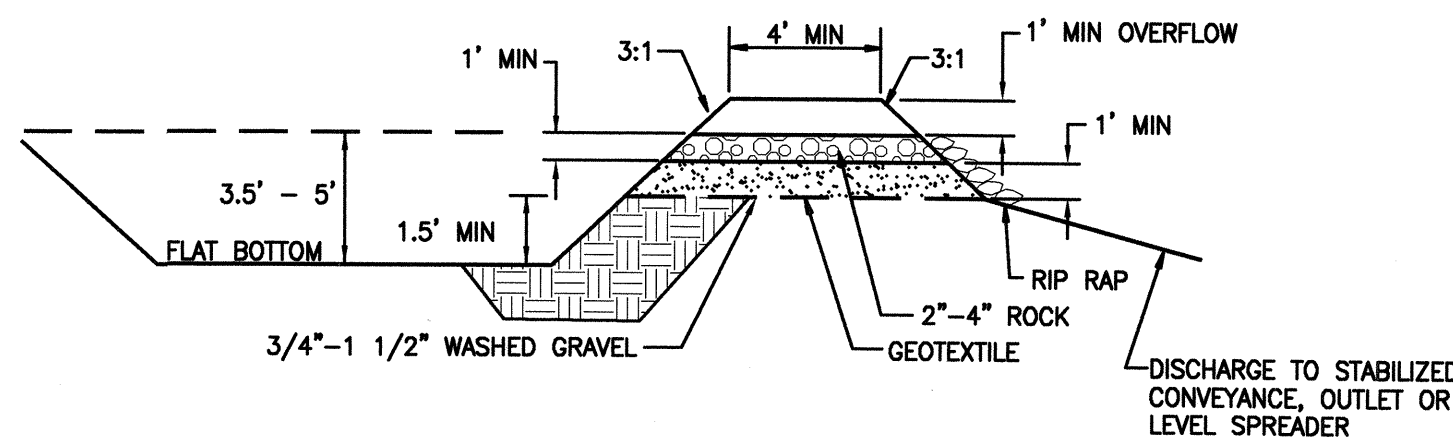


ROCK DAM X-SECTION

NOTE: REQUIRED ON SLOPES GREATER THAN 4 PERCENT

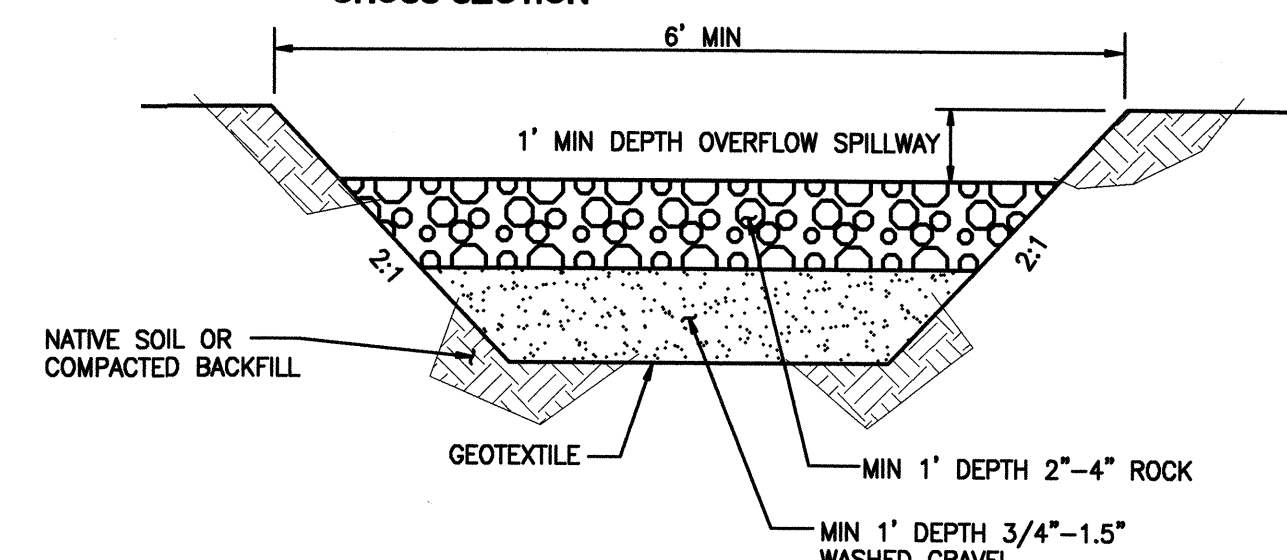
ROCK CHECK DAM

NOT TO SCALE



NOTE: TRAP MAY BE FORMED BY BERM OR BY PARTIAL EXCAVATION

CROSS SECTION



TRAP OUTLET

MAINTENANCE STANDARDS

- SEDIMENT SHALL BE REMOVED FROM THE TRAP WHEN IT REACHES 1 FOOT IN DEPTH
- ANY DAMAGE TO THE TRAP EMBANKMENTS OR SLOPES SHALL BE REPAIRED

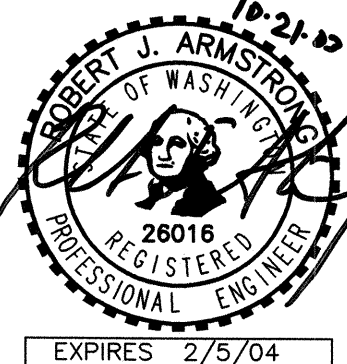
SEDIMENT TRAP OUTLET DETAIL

NOT TO SCALE

AS-BUILT

APPROVED BY:

DOUGLAS JACOBSON, P.E.
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER



18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
(425)251-5782 FAX

CIVIL ENGINEERING, LAND PLANNING,
SURVEYING, ENVIRONMENTAL SERVICES



Job Number
10189

Sheet

9A of 9

Title:
GRADING, EROSION, AND SEDIMENT
CONTROL NOTES AND DETAILS

For:
B AND J DEVELOPMENT
2630 - 116TH AVENUE NE, SUITE 100
BELLEVUE, WA 98004
(425) 828-6424

Scale:
Horizontal
Vertical
AS SHOWN
AS SHOWN

Designed: BJT
Drawn: BJT
Checked: BJT
Approved: RJA
Date: 4/02/02

File: P:\0008\10189\080910\Barghausen\10189-AS-Bldg.dwg Date/Time: 10/21/2003 15:08 Scale: 1=1' bldkington Xrefs: Z10189-b, HDEV-2204