ROAD CONSTRUCTION SPECIFICATIONS

DESIGN CRITERIA – ROAD CONSTRUCTION SHALL MEET THE REQUIREMENTS OF SPOKANE COUNTY B28 FIRE APPARATUS ROAD STANDARDS, THE SPOKANE COUNTY REQUIREMENTS FOR PRIVATE ROADS, AND STORMWATER MANAGEMENT GUIDELINES AND THE WDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREAFTER REFERRED TO AS STANDARD SPECIFICATIONS).
PRIVATE ROAD WITH CUL-DE SAC, RIGHT OF WAY WIDTH = 60'
TRAVELWAY WIDTH = 24'

CLEARING, GRUBBING AND ROADSIDE CLEANUP – CLEARING, GRUBBING AND ROADSIDE CLEANUP SHALL BE PERFORMED IN ACCORDANCE TO SECTION 2-01 OF THE STANDARD SPECIFICATIONS. ALL TOPSOIL AND VEGETATION SHALL BE REMOVED AND DISPOSED OF PRIOR TO SUBGRADE PREPARATION.

EXCAVATION AND BACKFILL – EXCAVATION OF THE PROPOSED ROADWAY SHALL CONFORM TO SECTION 2-03 OF THE STANDARD SPECIFICATIONS.

SURFACE AND SUBGRADE PREPARATION – SUBGRADE AND ROAD SURFACE SHALL BE COMPACTED TO 95% MAXIMUM DENSITY. ROAD CONSTRUCTION RELATED EARTHWORK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 2-06 OF THE STANDARD SPECIFICATIONS.

EROSION CONTROL – MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO PREVENT DAMAGE DUE TO EROSION AND SEDIMENTATION IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES AND AS SHOWN ON SHEET 1 OF THE STORMWATER MANAGEMENT PLAN.

CULVERTS – CULVERTS SHALL BE SIZED AND INSTALLED AS SHOWN ON THE PLAN AND SHALL BE CORRUGATED METAL PIPE MEETING THE SPECIFICATIONS OF 9-05 OF THE STANDARD SPECIFICATIONS.

AGGREGATE – TOP COURSE AGGREGATE SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR CRUSHED AGGREGATE SECTION 9-03 OF STANDARD SPECIFICATIONS.

INSPECTION AND CERTIFICATION – THE DESIGN ENGINEER SHALL MAKE FINAL INSPECTION OF THE COMPLETED ROAD CONSTRUCTION. DESIGN ENGINEER SHALL SUBMIT CONSTRUCTION CERTIFICATION AND AS-BUILT PLANS WITHIN THIRTY DAYS AFTER COMPLETION.

NOTES:
1. SEE SHEET 1 FOR TYPICAL ROAD SECTION WITH AND WITHOUT GRASSY PERCOLATION AREA.

2. ALL WEATHER SURFACE ON PRIVATE ROAD SHALL BE NATIVE GARRISON SOIL TYPE COMPACTED TO 95% MAXIMUM DENSITY.

3. ALL STORMWATER MANAGEMENT COMPONENTS SHALL BE MAINTAINED BY THE OWNER, OR OTHERWISE DESIGNATED ENTITY, PERIODIC AND ANNUAL INSPECTION OF STORMWATER SYSTEM COMPONENTS SHALL BE PERFORMED. ACCESS TO STORMWATER MANAGEMENT SYSTEM COMPONENTS SHALL REMAIN READILY ACCESSIBLE TO MAINTENANCE VEHICLES. GRASSY VEGETATION GROWTH SHALL BE MAINTAINED IN ROADSIDE GRASSY PERCOLATION AREAS AND DETENTION BASIN. ACCUMULATION OF SILT AND DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE.

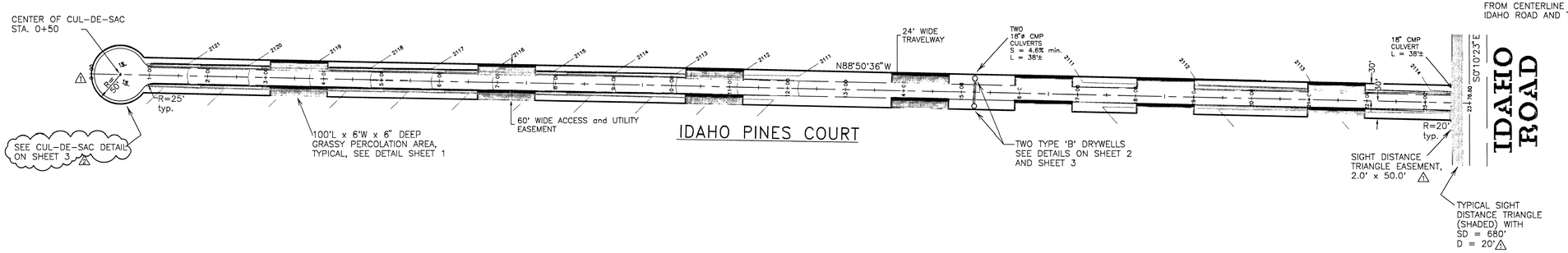
FIRE DISTRICT APPROVAL

DEVELOPER SIGNATURE △1

THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO THE APPLICABLE EDITION OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT. ALL DESIGN DEVIATIONS HAVE BEEN APPROVED BY THE SPOKANE COUNTY ENGINEER. I APPROVE THESE PLANS FOR CONSTRUCTION: △1

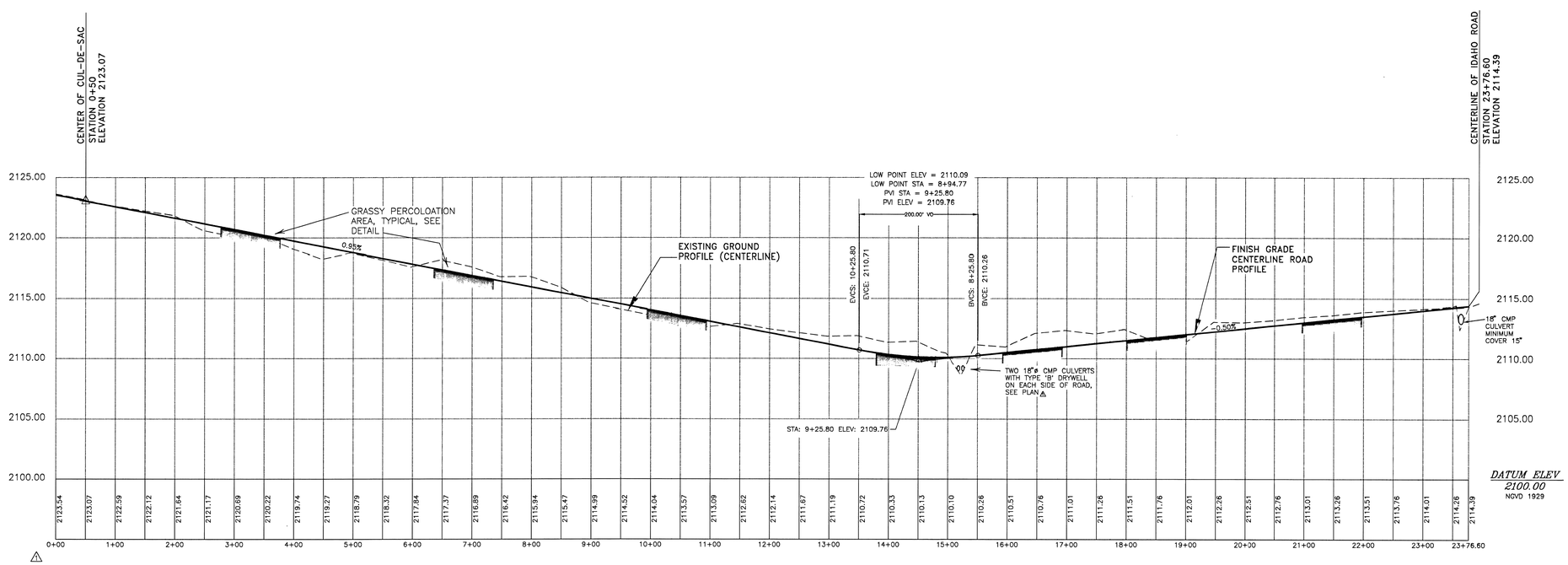
SCALE–1"=100'

0 50 100 200
SCALE IN FEET



IDAHO PINES COURT STA: 23+76.60 AT CENTERLINE OF IDAHO ROAD 531' FROM CENTERLINE INTERSECTION OF IDAHO ROAD AND TRENT ROAD △1

PLAN
SCALE–1"=100'



PROFILE
SCALE–1"=100' HORIZONTAL
1"=5' VERTICAL

SPOKANE COUNTY ENGINEER'S OFFICE
CONSTRUCTION PLANS
PROJECT # 50860
DATE RECEIVED 5-30-96
CONSTRUCTION DOCUMENTATION AND CERTIFICATION REQUIREMENTS ARE REQUIRED PRIOR TO FEE/FINAL OF COUNTY DEVELOPMENT CODE

SPOKANE COUNTY
OFFICIAL PUBLIC DOCUMENT
ORIGINAL

SURVEYOR'S STAMP
ERIC J. ELDENBURG
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
EXPIRES 06/10/97
ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK'D
2	5-28-96	SHEET RENUMBER, CUL DE SAC NOTE	CAG/EJE
1	5-10-96	S.D. EASEMENT, STATEMENTS, ROAD STATIONING TWO CULVERTS, REMOVE DETENTION BASIN	CAG/EJE

James A. Sewell and Associates
CONSULTING ENGINEERS
NEWPORT, WASHINGTON 99156
(509) 447-3626

SHEET TITLE: "IDAHO PINES COURT" ROAD DESIGN
PLAN and PROFILE

PROJECT: ROAD LAYOUT FOR "IDAHO PINES ESTATES" SUBDIVISION

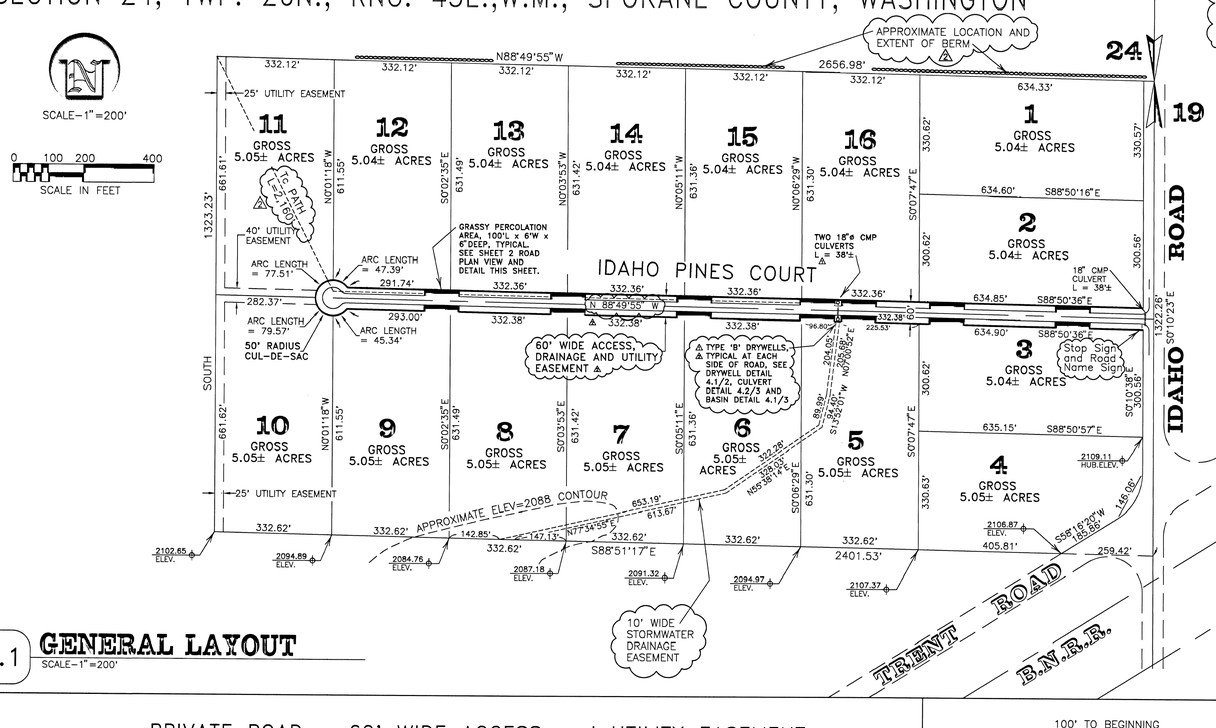
DATE: 4-25-96
SCALE: AS SHOWN
DRAWN BY: CAG
CHECKED BY: EJE
FILE No.: IPINES1.DWG

SHEET 1 OF 3

SP 1060

"IDAHO PINES ESTATES"

SECTION 24, TWP. 26N., RNG. 45E.,W.M., SPOKANE COUNTY, WASHINGTON



2.1 **GENERAL LAYOUT**
SCALE-1"=200'

NOTE:
THE AREA NORTH OF THIS PROJECT IS CULTIVATED FIELD WITH A BERM CREATED NEAR THE SOUTHERN BOUNDARY. FURROWS ARE CREATED WHICH RUN PERPENDICULAR TO THE SLOPE AND PREVENTS RUNOFF AND EROSION DURING RAINFALL EVENTS. FUTURE DEVELOPMENT OF THIS AREA MUST INCLUDE PROVISIONS FOR STORMWATER MANAGEMENT.

INTENDED USE OF SUBDIVISION

ALL LOTS INTENDED FOR RESIDENTIAL USE SUBDIVISION IS IN A SEMI-RURAL RESIDENTIAL-5 ZONE (SRR-5)

ELEVATION DATUM: NGVD 1929
APPROXIMATE LOCATION OF ELEV=2088 CONTOUR IS INTERPOLATED FROM USGS QUAD MAP

DEVELOPER

MIKE SCHMITZ
SOUTH 107 HOWARD
SPOKANE, WA. 99204

SIGNATURE

NOTES:
1. SOIL TYPE IS DETERMINED TO BE GARRISON GRAVELLY LOAM, 0-5% SLOPE, WITH PERMEABILITY OF 0.6-2.0 IN/HR FROM USDA SOIL CONSERVATION SERVICE INFORMATION.

2. MAINTAIN GRASSY VEGETATION GROWTH AT INFILTRATIVE SURFACE OF GRASSY PERCOLATION AREAS.

SPECIFICATIONS/OPERATION & MAINTENANCE REQUIREMENTS

GENERAL SPECIFICATIONS

All erosion and sediment control methods and stormwater management plan construction shall conform to the requirements of the "Handbook of Best Management Practices for Stormwater Management and Erosion and Sedimentation Control," (hereinafter referred to as the Handbook)

EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION

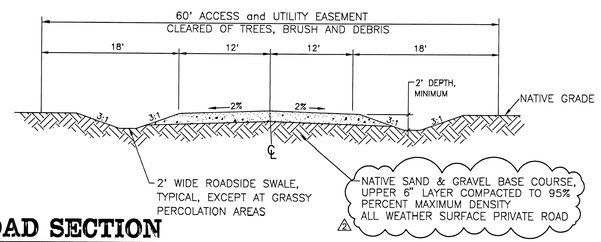
An Erosion/Sedimentation Control (ESC) plan is required for this project. Implementation of the ESC plan, and construction, maintenance, and upgrading of the ESC facilities are the responsibility of the Developer until all construction is completed and accepted by Spokane County, or until vegetation is established throughout the site, and accepted by Spokane County, whichever is later. Erosion and sediment control during construction shall be accomplished as necessary through installation of straw bales or silt fencing, as shown in the attached drawings, to minimize sediment migration off-site, and through the use of other methods as necessary, as described in Chapter IV, "Temporary Soil Stabilization," of the Handbook. All methods shall be in accordance with the guidelines as described in the Handbook. Approval of the ESC plan does not constitute approval of any of the proposed road, storm drainage, grading or utility design elements shown on the ESC plan. THe Erosion/Sedimentation control measures shown are the minimum requirements for the anticipated site condition. The Contractor shall inspect and maintain these ESC measures daily, and shall maintain and upgrade these measures as necessary to prevent sediment-laden water from either flowing off the site, or into new/existing storm drainage facilities, such as detention basins, grassy percolation areas, drywells, culverts, or gravel galleries. The Contractor shall be responsible for installing Rock Construction Entries at any and all locations used to enter or exit the project site.

OPERATION AND MAINTENANCE REQUIREMENTS

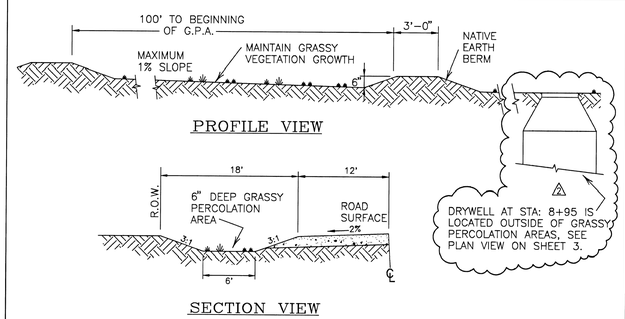
All temporary and permanent erosion and sediment control methods and stormwater management plan construction shall be maintained in accordance with the guidelines as described in the Handbook. In particular, all grassy infiltration areas shall be maintained to provide continued and productive grass growth, and sedimentation buildup shall be removed as necessary to provide continued grass growth, and as necessary to allow continued soil permeability. Drywells shall be inspected semi-annually for excess accumulation of sediments. All stormwater management system components shall be inspected during storm events and at least semi-annually for proper functioning. Maintenance and inspection of grassy percolation areas, drywells, ditches, channels and all other related stormwater management components shall be the responsibility of the lot owners as specified on the plat and in the separate Declaration of Covenant for each lot.

2.4 **SPECIFICATIONS**

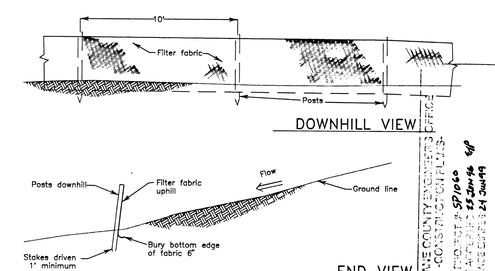
PRIVATE ROAD – 60' WIDE ACCESS and UTILITY EASEMENT
UTILITIES OUTSIDE OF DITCHLINE AT ALL TIMES



3.1 **TYPICAL ROAD SECTION**
N.T.S.

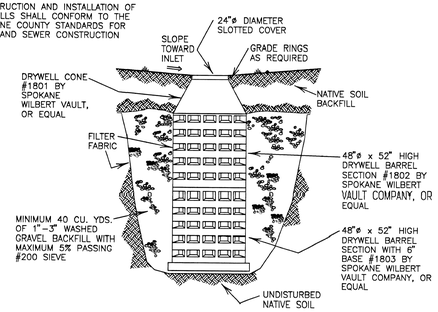


3.3 **TYPICAL GRASSY PERCOLATION AREA DETAIL**
N.T.S.

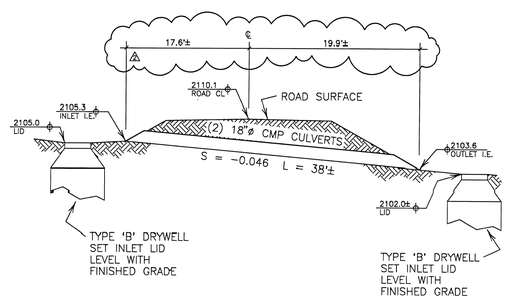


3.4 **SILT FENCING**
N.T.S.

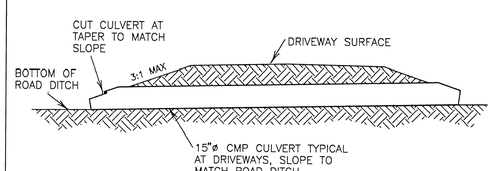
NOTE:
CONSTRUCTION AND INSTALLATION OF DRYWELLS SHALL CONFORM TO THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION



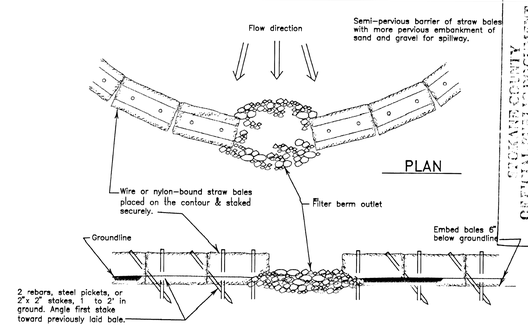
4.1 **TYPE 'B' DRYWELL DETAIL**
N.T.S.



4.2 **CULVERT PROFILE STA: 8+95**
N.T.S.



4.3 **TYPICAL DRIVEWAY CULVERT DETAIL**
N.T.S.



4.4 **STRAW BALE BARRIERS**
N.T.S.

SPOKANE COUNTY OFFICIAL PUBLIC DOCUMENT ORIGINAL

SURVEYOR'S STAMP
ERIC J. ELDENBURG
STATE OF WASHINGTON
18646
PROFESSIONAL ENGINEER
EXPIRES 06/10/97
ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK'D
2	5-28-96	SHOW BERM, Tc PATH, ROAD SIGN, MAINTENANCE	CAG/EJE
1	5-10-96	DRYWELL DETAILS, REMOVE DETENTION BASIN	CAG/EJE

James A. Sorrell and Associates
CONSULTING ENGINEERS
NEWPORT, WASHINGTON 99156
(509) 447-3626

SHEET TITLE: GENERAL PLAN, DETAILS and SPECIFICATIONS

PROJECT: STORMWATER MANAGEMENT PLAN FOR "IDAHO PINES ESTATES"

DATE:	4-25-96
SCALE:	AS SHOWN
DRAWN BY:	BAD/CAG
CHECKED BY:	EJE
FILE No.:	IPINES2.DWG

SHEET 2 OF 3

SP 1060

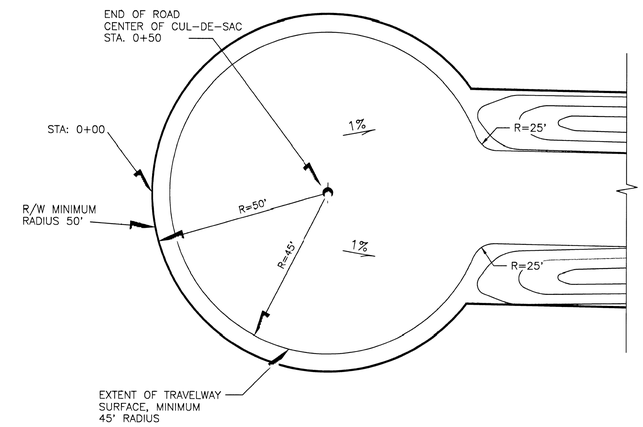
DEVELOPER

MIKE SCHMITZ
SOUTH 107 HOWARD
SPOKANE, WA 99204

SIGNATURE

SCALE–1"=20'

0 10 20 40
SCALE IN FEET



CUL DE SAC DETAIL

SCALE–1"=20'

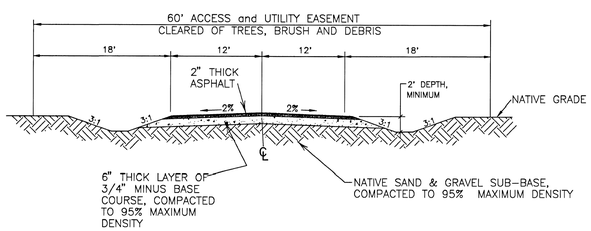
NOTES:
1. IDAHO PINES COURT PRIVATE ROAD APPROACH SHALL BE CONSTRUCTED AS SHOWN BY THE SECTION BELOW. THE NEW ROAD APPROACH SURFACE SHALL BE CONSTRUCTED TO SMOOTHLY FIT TO THE EXISTING IDAHO ROAD SURFACE AND SHALL EXTEND, AT A MINIMUM, TO THE OUTER BOUNDARY OF THE IDAHO ROAD RIGHT OF WAY.

2. ALL ROAD CONSTRUCTION AND MATERIAL SHALL CONFORM TO THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE WDOT 1994 STANDARD SPECIFICATIONS.

3. SUB–BASE AND BASE COURSE MATERIAL SHALL BE COMPACTED TO 95% MAXIMUM DENSITY.

4. BASE COURSE MATERIAL SHALL CONFORM TO SPECIFICATIONS FOR 3/4" MINUS CRUSHED ROCK IN WDOT 1994 STANDARD SPECIFICATIONS, SECTION 4–02 AND SECTION 9–03.10

5. APPROACH SURFACE SHALL BE MINIMUM 2" THICK, CLASS A, ASPHALT CONCRETE PAVEMENT. ASPHALT PAVING SHALL CONFORM TO THE SPECIFICATIONS OF THE WDOT 1994 STANDARD SPECIFICATIONS, SECTION 5–04 AND SECTION 9–02.

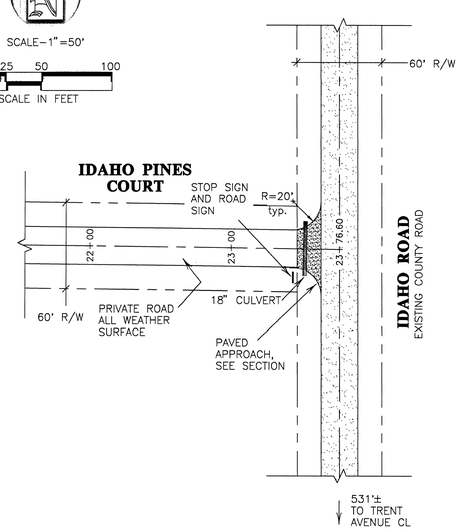


PAVED APPROACH TYPICAL SECTION

NOT TO SCALE

SCALE–1"=50'

0 25 50 100
SCALE IN FEET

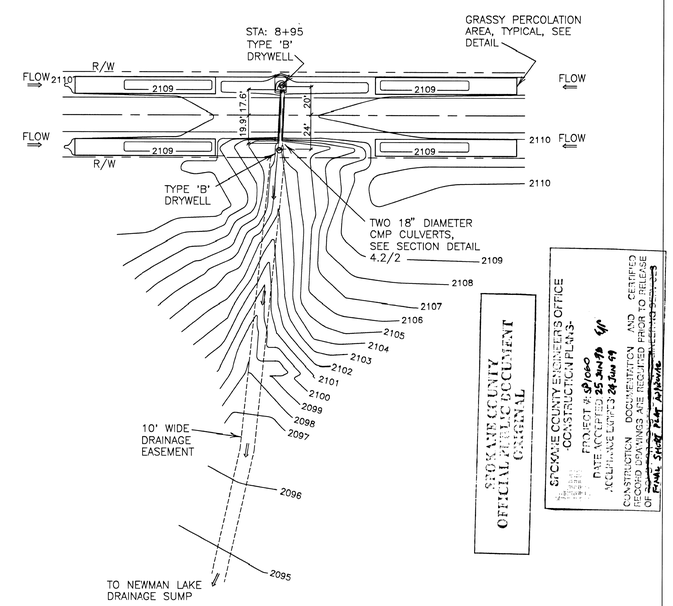


PAVED APPROACH PLAN DETAIL

SCALE–1"=50'

SCALE–1"=50'

0 25 50 100
SCALE IN FEET



SPOKANE COUNTY
OFFICIAL PUBLIC DOCUMENT
ORIGINAL

SPOKANE COUNTY ENGINEER'S OFFICE
CONSTRUCTION PLAN
PROJECT #: 91060
DATE ACCEPTED: 25 Jun 96
SCALE: HORIZ 1=50 VERT 1=5
CONSTRUCTION DOCUMENTATION AND
RECORD DRAWINGS ARE REQUIRED PRIOR TO RELEASE
OF PERFORMANCE BOND. Final Sheet Pave Asphalt Surface

DRAINAGE CHANNEL DETAIL

SCALE–1"=50'

SURVEYOR'S STAMP

ERIC J. ELLENBURG
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
10148

EXPIRES 06/10/97

ENGINEER'S STAMP

No.	DATE	REVISION	DRN/CHK'D
2	6-6-96	NEW DETAILS, SIGNATURE STATEMENT	CAG/EJE

James A. Sewell and Associates
CONSULTING ENGINEERS
NEWPORT, WASHINGTON 99156
(509) 447-3626

SHEET TITLE: "IDAHO PINES COURT" ROAD DESIGN
ROAD AND SWM DETAILS

PROJECT: "IDAHO PINES ESTATES SUBDIVISION"

DATE:	5-28-96
SCALE:	AS SHOWN
DRAWN BY:	CAG
CHECKED BY:	EJE
FILE No.:	IPINES3.DWG

SHEET 3 OF 3

SP 1060