



Department of Health and Environmental Sciences
STATE OF MONTANA HELENA, MONTANA 59601

October 26, 1976

John S. Anderson M.D.
DIRECTOR

Re: Mallard Springs Subdivision
Sweet Grass County

Honorable Thomas Judge, Governor, State of Montana, Helena
Citizens Advocate, Helena
Environmental Quality Council, Helena
Montana Fish and Game Department, Helena
Department of Highways, Helena
Department of Community Affairs, Division of Planning, Helena
Department of Natural Resources and Conservation, Helena
Department of State Lands, Helena
Montana State Library, Helena
Board of County Commissioners, Courthouse, Big Timber, MT 59011
City-County Planning Board, Courthouse, Big Timber, MT 59011
Sanitarian, Ray Hedrick, Box 109, Livingston, MT 59047
Environmental Information Center, Box 12, Helena
C. W. Gonder, 823 East Call Street, Livingston
Mrs. Vel Jansen, 430 South Sixth, Livingston
Mrs. Winifred Lucky, 420 South Sixth, Livingston
Mary Lee Reese, League of Women Voters, 29 South Alta, Helena
Tom Horobik, Pres., Montana Wilderness Assn., 4000 4th Ave. N., Great Falls
Northern Rockies Action Group, #9 Placer Street, Helena
Paul T. Richards, 1836 Floweree, Helena
John Schillinger, Microbiology Department, Montana State University, Bozeman
Concerned Citizens for a Quality Environment, c/o Ron Erickson, Chairman,
University of Montana, Missoula
Student Environmental Research Center, University of Montana, Room 212,
Venture Center, Missoula
John P. Duke, Assistant Vice President, Land Management, Burlington
Northern, 650 Central Building, Seattle, Washington, 98104
Herb Anderson, P. O. Box 42, Raynesford, MT 59469
Mike Roach, Air Quality Bureau, Environmental Sciences Division
Don Willems, Water Quality Bureau, Environmental Sciences Division
State-Local Relations Project, Commission on Local Government,
State Capitol, Helena
J. Anne Skinner, Public Information Unit, DHES, Helena
Audubon Society, Attn: Sam Sperry, 1823 Highland Avenue, Helena
Ducks Unlimited, Attn: Patrick McDonough, Box 327, Billings
Montana Cooperative Wildlife Research Unit, Attn: Dr. John Craighead,
University of Montana, Missoula
Montana Outfitter and Dude Ranchers Association, Attn: Glen Childers,
7-B Ranch, Brusett
Montana Wildlife Federation, Attn: Don Aldrich, 410 Woodworth Ave.,
Missoula
Montana Women's Political Caucus, Attn: Elenor Pratt, 1434 South 3rd,
Bozeman
Montana Woolgrowers Association, Box 1693, Helena
Sierra Club, Attn: Joe Angell, General Delivery, Helena

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Trout Unlimited, Attn: Jim Handley, Box 140, Manhattan
Wilderness Society, Attn: Bill Cunningham, Box 12, Helena
Rick Graetz, Box 894, Helena,
Rick Johnson, Border Grizzly Project, School of Forestry, University
of Montana, Missoula
Josephson and Fredricks, Box 1047, Big Timber
First Big Timber Corp., Box 1047, Big Timber
Montana Bureau of Mines & Geology, Butte, MT 59701
Park Electric Co-operative Inc., Box 908, Livingston
Continental Telephone of the West, Box 867, Big Timber
Big Timber Volunteer Fire Dept., Big Timber
City of Big Timber - Sweet Grass County Sheriff-Police Dept., Big Timber
Big Timber Grade School, Big Timber
Sweet Grass County High School, Big Timber
Kenneth G. Boe, Big Timber
Ellen V. Boe, Big Timber
Jones E. Faw, Big Timber
Clayton Ranch, Inc., Big Timber
Harold Hawks, Big Timber
Christian, Spring, Sielbach & Associates, 2020 Grand Ave., Billings, 59102

Ladies & Gentlemen:

The enclosed preliminary environmental review has been prepared for Mallard Springs, a proposed subdivision in Sweet Grass County. This environmental review is submitted for your consideration. Comments and questions will be accepted for 10 days following issuance of this statement at which time it will be assumed that the persons or agencies consulted have no comments to make. One extension of time not to exceed seven (7) days will be granted upon request if there is sufficient reason for said request. All comments should be sent to the undersigned.

Sincerely yours,



Edward W. Casne, Chief
Subdivision Bureau
Environmental Sciences Division
Phone: 449-3946

EWC:APK:ti
Enclosure

cc: Ben Wake
Terry Carmody
Tom Ellerhoff

POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Social structures and mores			✓			
2. Cultural uniqueness and diversity			✓			
3. Local and state tax base and tax revenue			✓			
4. Agricultural or industrial production			✓			*
5. Human health				✓		
6. Quantity and distribution of community and personal income				✓		
7. Access to and quality of recreational and wilderness activities			✓			
8. Quantity and distribution of employment				✓		
9. Distribution and density of population and housing			✓			
10. Demands for government services			✓			*
11. Industrial and commercial activity				✓		
12. Demands for energy			✓			
13. Locally adopted environmental plans and goals				✓		
14. Transportation networks and traffic flows			✓			

Other groups or agencies contacted or which may have overlapping jurisdiction. Individuals or groups contributing to this PER.

See Attachment #1

Recommendation concerning preparation of EIS.

Circulate PER

PER Prepared by:

Tom Ellerhoff and Alfred Keppner

DATE:

October 26, 1976

PRELIMINARY ENVIRONMENTAL REVIEW

Department of Health and Environmental Sciences

Division/Bureau Environmental Sciences Division/Subdivision Bureau

Project or Application Mallard Springs Subdivision

Description of Project The proposed subdivision would consist of 35 residential lots on 61.94 acres and 72.22 acres in common area. It is located about 4 miles east of Big Timber (see attached map). This subdivision is not a second home or recreational development. It would be served by individual water and sewer systems.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Terrestrial and aquatic life and habitats			✓			*
2. Water quality, quantity and distribution			✓			*
3. Geology and soil quality, stability and moisture			✓			
4. Vegetation cover, quantity and quality			✓			
5. Aesthetics		✓				*
6. Air quality			✓			*
7. Unique, endangered, fragile, or limited environmental resources				✓		
8. Demands on environmental resources of land, water, air and energy			✓			
9. Historical and archaeological sites				✓		

MONTANA STATE DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

PRELIMINARY ENVIRONMENTAL REVIEW CONTINUED
Mallard Springs Subdivision
a proposed subdivision in Sweet Grass County

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

1. Since the area to be used for development has been leveled and used for irrigated hay meadow, the natural vegetation has already been altered. No aquatic habitats exist on the area to be developed. The Region 5 staff of the Montana Fish & Game had no comments with respect to wildlife.
2. Two wells have been drilled on the subject property. Chemical and bacterial tests have shown the water to be of good quality. A well also exists on an adjacent tract of land.
5. The proposed subdivision is situated in a scenic setting. The Crazy Mountains are situated northwest of the property, the Bridger Range to the west, the Absaroka Range to the south and the Yellowstone River forms the eastern boundary. The land beyond the river is rolling prairie.

Man's intervention in the area is obvious. The river bottom land is now used for growing hay and pasture. Irrigation ditches traverse the land, with a number of farm buildings situated in the northeastern corner of the property. The Burlington Northern tracks run near the southwest edge of the development and Interstate 90 will soon be relocated to parallel the south side of the tracks.

The creation of a subdivision in the area may be aesthetically displeasing to some people, but it will not be the first step in converting the land from its natural state to a developed area. The proximity of the railroad and interstate highway have added to the transition in land use.

The owners are attempting to develop in harmony with the existing landscape. The few trees growing in the area will not be destroyed and the marsh bordering the west side of the property will be preserved for private duck hunting. Additionally, the developers have drawn up a set of restrictive covenants to control development.

6. Increased traffic, heating, etc. will change the air quality to a minor effect in a localized area.

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

4. Approximately 62 acres of irrigated hay land will be removed from production.
10. The City of Big Timber can and will serve the development. Collection service could be available when sufficient houses are built.

The superintendant of the Big Timber grade school and principal of the Sweet Grass County High School state their institutions can absorb the anticipated additional students.

The county sheriff's office and Big Timber Volunteer Fire Department states they can serve the development without over extending their facilities. Power and telephone services are also available.

ALTERNATIVES

1. Approve the development without preparation of an environmental impact statement.
2. Write an environmental impact statement prior to further consideration of approval.
3. Disapprove the Development as proposed.

RECOMMENDATIONS

The Department of Health and Environmental Sciences recommends the first alternative.

Agencies Consulted:

Sweet Grass City-County Health Dept.
Park Electric Co-operative, Inc.
Continental Telephone of the West
Big Timber Volunteer Fire Dept.
City of Big Timber-Sweet Grass County Sheriff-Police Dept.
Big Timber Grade School
Sweet Grass County High School
Dept. of Fish & Game
Dept. of Natural Resources and Conservation
Dept. of Highway
Bureau of Mines & Geology
City of Big Timber

Prepared by: Tom Ellerhoff and Alfred P. Keppner, October 19, 1976.

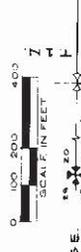
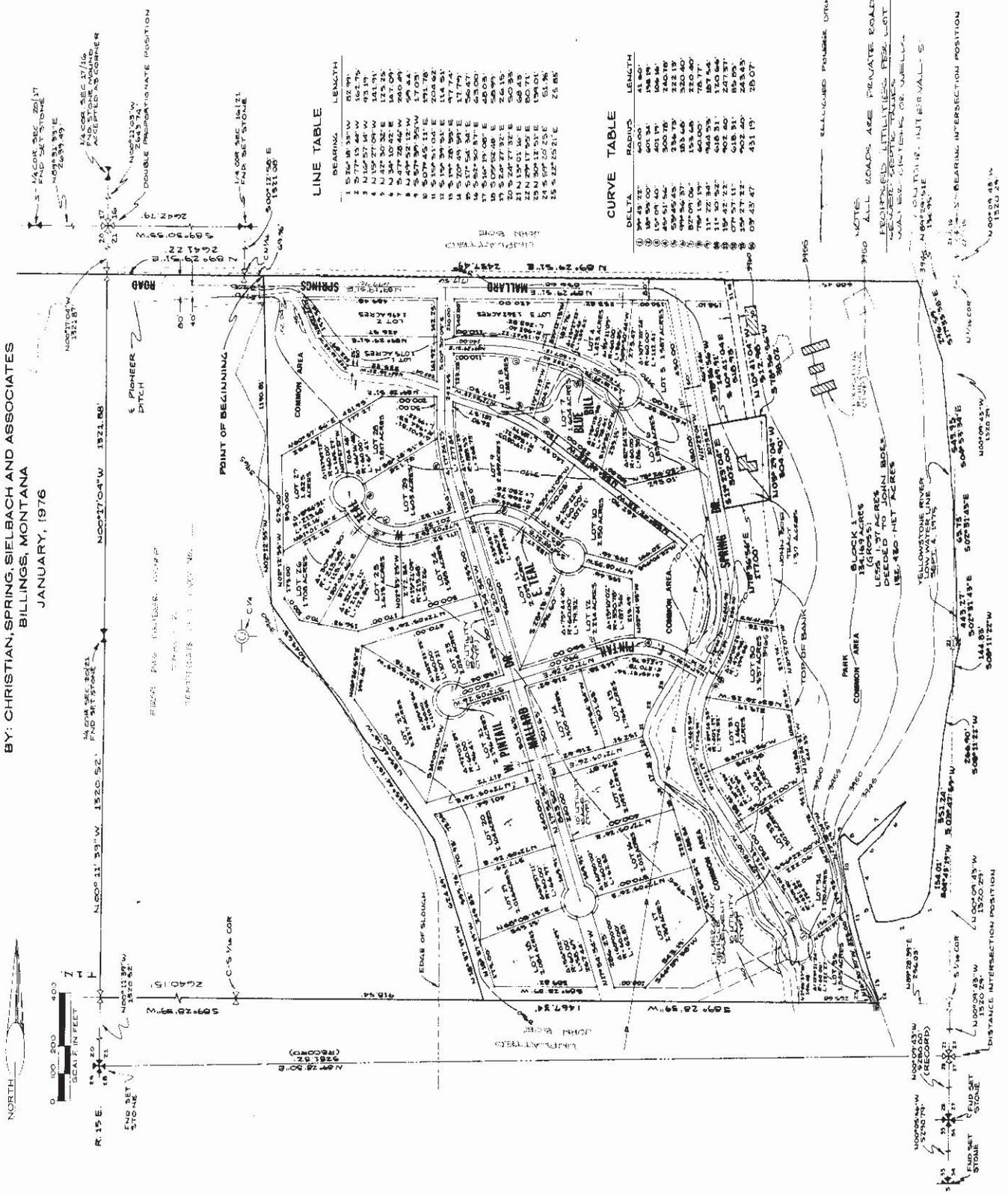
F ELIMINARY

MALLARD S. RINGS SUBDIVISION

LOCATED IN TRACT 3 OF CERTIFICATE OF SURVEY NO. _____
SECTION 21, T.1N., R.15E., P.M.1.
SWEET GRASS COUNTY, MONTANA

FOR: FIRST BIG TIMBER CORPORATION
BY: CHRISTIAN, SPRING, SIELBACH AND ASSOCIATES
BILLINGS, MONTANA

JANUARY, 1976



R. 15 E.
N. 00° 11' 33" W. 1320.52'
N. 00° 11' 33" W. 1321.58'
N. 00° 11' 33" W. 1322.58'

3" V. COR. SEC. 20/17
FIND SET STONE
N. 00° 11' 33" W.
1323.58'

1/4 COR. SEC. 17/16
FIND SET STONE
N. 00° 11' 33" W.
1324.58'

DOUBLE PROPORTIONATE POSITION
N. 00° 11' 33" W.
1325.58'

1/4 COR. SEC. 16/11
FIND SET STONE
N. 00° 11' 33" W.
1326.58'

1/4 COR. SEC. 15/11
FIND SET STONE
N. 00° 11' 33" W.
1327.58'

1/4 COR. SEC. 14/11
FIND SET STONE
N. 00° 11' 33" W.
1328.58'

1/4 COR. SEC. 13/11
FIND SET STONE
N. 00° 11' 33" W.
1329.58'

1/4 COR. SEC. 12/11
FIND SET STONE
N. 00° 11' 33" W.
1330.58'

1/4 COR. SEC. 11/11
FIND SET STONE
N. 00° 11' 33" W.
1331.58'

1/4 COR. SEC. 10/11
FIND SET STONE
N. 00° 11' 33" W.
1332.58'

1/4 COR. SEC. 9/11
FIND SET STONE
N. 00° 11' 33" W.
1333.58'

1/4 COR. SEC. 8/11
FIND SET STONE
N. 00° 11' 33" W.
1334.58'

1/4 COR. SEC. 7/11
FIND SET STONE
N. 00° 11' 33" W.
1335.58'

1/4 COR. SEC. 6/11
FIND SET STONE
N. 00° 11' 33" W.
1336.58'

1/4 COR. SEC. 5/11
FIND SET STONE
N. 00° 11' 33" W.
1337.58'

1/4 COR. SEC. 4/11
FIND SET STONE
N. 00° 11' 33" W.
1338.58'

1/4 COR. SEC. 3/11
FIND SET STONE
N. 00° 11' 33" W.
1339.58'

1/4 COR. SEC. 2/11
FIND SET STONE
N. 00° 11' 33" W.
1340.58'

1/4 COR. SEC. 1/11
FIND SET STONE
N. 00° 11' 33" W.
1341.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1342.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1343.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1344.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1345.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1346.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1347.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1348.58'

1/4 COR. SEC. 0/11
FIND SET STONE
N. 00° 11' 33" W.
1349.58'

LINE TABLE

BEARING	LENGTH
1 S 52° 48' 31" W	82.99'
2 S 77° 15' 48" W	162.79'
3 N 16° 57' 54" W	93.19'
4 N 27° 50' 32" E	125.25'
5 N 34° 10' 42" E	147.09'
6 S 27° 28' 46" W	260.49'
7 S 57° 39' 35" W	17.03'
8 S 07° 45' 11" E	591.78'
9 S 15° 39' 53" E	114.81'
10 S 19° 28' 59" E	97.74'
11 S 20° 43' 59" E	11.79'
12 S 21° 30' 51" E	43.00'
13 S 22° 30' 51" E	48.09'
14 S 23° 30' 51" E	48.09'
15 S 24° 30' 51" E	48.09'
16 S 25° 30' 51" E	48.09'
17 S 26° 30' 51" E	48.09'
18 S 27° 30' 51" E	48.09'
19 S 28° 30' 51" E	48.09'
20 S 29° 30' 51" E	48.09'
21 N 19° 01' 46" E	68.43'
22 N 30° 11' 51" E	179.01'
23 S 07° 22' 23" E	51.36'
24 S 27° 25' 21" E	25.85'

CURVE TABLE

DELTA	RADIUS	LENGTH
1 99° 45' 22"	40.00'	41.80'
2 150° 00' 40"	40.17'	104.84'
3 45° 51' 54"	3000.76'	240.76'
4 59° 45' 45"	236.79'	222.13'
5 67° 09' 04"	153.48'	220.40'
6 76° 19' 19"	60.00'	78.77'
7 81° 50' 32"	418.31'	183.64'
8 87° 57' 11"	618.31'	247.37'
9 94° 03' 47"	431.19'	280.07'

NOTE: ALL ROADS ARE PRIVATE ROADS.
PROPOSED UTILITIES PER LOT
OWNER'S RECORDS OR VELLELLA
LOCAL GOVERNMENT OR VELLELLA
LOCAL GOVERNMENT INTERVALS
1/4 COR. SEC. 10/11
1320.58'

1/4 COR. SEC. 10/11
1321.58'

1/4 COR. SEC. 10/11
1322.58'

1/4 COR. SEC. 10/11
1323.58'

1/4 COR. SEC. 10/11
1324.58'

1/4 COR. SEC. 10/11
1325.58'

1/4 COR. SEC. 10/11
1326.58'

