November 19, 2026

Tom Ratermann
City of Columbia

SENT VIA: Email
(tom.ratermann@como.gov)
(justin.fessler@como.gov)

RE: Boone County Regional Sewer District
Brown Station and Richardson Acres Regionalization
Cochran Project No. 26-10795

Tom,

Following our recent discussion, the proposed improvements and preliminary receiving sewer capacity calculations are summarized below for the City's review and concurrence. An exhibit of the recommended alternative is attached.

Proposed Improvements

The recommended project would close the Richardson Acres lagoon and Brown Station recirculating sand filter and convey wastewater to the City's sewer in the Settlers Ridge area near Brown Station Road and Ketterer Road. System improvements will include:

Richardson Acres: New duplex lift station with pumping capacity of 180 gpm through approximately 8,100 feet of 6-inch force main to the vicinity of the Brown Station sand filter.

Brown Station: Approximately 2,400 feet of new 8-inch gravity sewer from the Brown Station sand filter to the City of Columbia collection system. The new gravity sewer would convey the combined wastewater to City Manhole 35O59.

Initial Flow and Pumping Calculations

Permit-listed actual flows: Richardson Acres 3,700 gpd; Brown Station 1,300 gpd.

Proposed Richardson Acres Lift Station pumping rate = 180 gpm

Brown Station peak flow for seven existing connections = 8 gpm

Initial discharge to City sewer = 180 + 8 = 188 gpm

City Receiving Sewer Capacity

The existing 8-inch sewer was evaluated from Manhole 35O59 to Manhole 35O2, where it increases to 12-inch diameter. Capacity was calculated using a minimum calculated slope of approximately 0.50%.

Full-flow capacity = 497 gpm

Planning capacity at 80% of calculated full-flow capacity = 397 gpm

Existing City peak flow from 97 connections within Settler's Ridge = 101 gpm

Additional flow capacity = 397 − 101 = 296 gpm

Remaining planning capacity after initial connection = 296 − 188 = 108 gpm

We request the City's preliminary concurrence with the proposed connection and receiving sewer capacity evaluation. Final design details will be coordinated with the City.

Sincerely,

David Van Leer, P.E.
Cochran

10795-ALT2

Alternative No. 2 – Proposed Alignment
Brown Sta. & Richardson Ac. FPA #3
Boone County Regional Sewer Dist.

EXHIBIT ALT2 NOVEMBER, 2026

Existing Sanitary Features

- Treatment Facility/Pump Station
- Existing Gravity Main (District)
- Existing Force Main (District)
- Existing Gravity Main, 8" (City)
- Existing Gravity Main, 12" (City)

Parcels

- Parcels
- Existing Service Boundaries

- **Proposed Lift Station**
- **Proposed Force Main**
- **Proposed Gravity Main**
- **Proposed Manhole**

N

Scale: 1" = 420'

0 210 420 840 1,260 Feet

COCHRAN

NOTES:

NOT TO BE USED FOR CONSTRUCTION
ALIGNMENTS ARE PRELIMINARY AND SUBJECT TO CHANGE

Richardson Acres

Future 180 GPM Pump Station at Richardson Acres

Richardson Acres Lagoon Treatment Plant

Oak Ridge Mobile Home Park

Oak Ridge MHP Lagoon Treatment Plant (Private)

PROPOSED 6" Ø FORCE MAIN FROM RICHARDSON ACRES TO BROWN STATION

Hillcrest Residential Care Treatment Plant (Private)

Hillcrest Residential Care

PROPOSED 6" Ø FORCE MAIN FROM RICHARDSON ACRES TO BROWN STATION

Brown Station

Brown Station RSF Treatment Plant

PROPOSED 8" Ø GRAVITY MAIN FROM BROWN STATION TO MH 35O59

EX. MH 35O59
T.E. - 872.65
I.E. - 866.90

Sharidan Hills Pump Station

Liberty Baptist Church Lagoon Treatment Plant

Liberty Baptist Church

N Flamingo Ct
Honesty Ct
E Flamingo Dr
N Route B
E McGee Rd
E Spiva Crossing Rd
Clays Fork
N Brown Station Rd
N Brown Station Dr
E Orear Rd
N Hillview Dr
N Brick Rd
E Ketterer Rd
N Glen Meadow Dr
E Stetler Glen Dr
N Stetler Ridge Dr
N La Porte Ave
N Sharidan Blvd
N Gabe Rd
N Zack Rd
E Heller Dr
E Highway HH
N Plain View Dr
N Hickory Dr
E Daisy Dr
N Marigold Ct
Bonthall Blvd
N Fall Creek Dr