

Matthew Vander Tuig

The following are the results of a Board or Commission Application sent on July 5th, 2009 at 06:34PM (CDT).

First Name: Matthew
Middle Name: Jon
Last Name: Vander Tuig

Address: 2013 Valley View Road
City: Columbia
State: MO
Zip Code: 65201
Phone: (573)356-7625
Cell Phone: (573)356-7625
Email: m.vandertuig@mchsi.com

City Limits: Yes
Ward: 6
Boone County: Yes
Registered: Yes

Employer: Trabue, Hansen & Hinshaw, Inc.
Title: Senior Project Engineer
Office Phone: (573)814-1568
Product or Service: Civil/Site, Transportation, & Structural Engineering, Surveying

Board or Commission: Planning and Zoning Commission
Category:

Current Boards: N/A

Community Service: Volunteer musician in the Columbia Civic Orchestra and the 9th Street Philharmonic. Participating in the East West Connector Study Group for alternate alignments for the Rockhill Bluffdale Get-About Trail.

Why Do You Wish To Serve: To serve the community in a positive and responsible manner by supporting planned development with regards to future transportation corridors, infrastructure and utility upgrades and expansion, and environmental impacts.

Experience:

I am a licensed Professional Engineer in the State of Missouri and currently serve as senior project Engineer at a local consultant firm in Columbia. I have been project engineer on several LEED commercial development projects in town and have a good understanding of the current development process with the City of Columbia. Although I have not been involved with a development project that has required rezoning as a project engineer, I can offer experience with the issues that affect development, such as necessary infrastructure improvements, potential required offsite improvements, access management depending on the adjacent roadway classification, and the potential need for traffic impact studies. I am knowledgeable of the details and overall goals of the new stormwater ordinance.

Applicant Monetary Interest: No
Applicant Family Monetary Interest: No
Explain:

Other Comments or Information: In addition to my work as an engineer, I also co-own a retail store in downtown Columbia with my wife, Amanda. So I have a unique perspective of also understanding business concerns, especially in the Special Business District.

Read Duties: Yes

Reference Name 1: Erik Miller, AIA, Building Construction Codes Commission

Reference Address 1: 15 South Tenth Street, Columbia, MO 65201

Reference Phone 1: (573)449-2683

Reference Name 2: Barbara Hoppe

Reference Address 2: 607 Bluff Dale Drive, Columbia, MO 65201

Reference Phone 2: (573)443-5107

Attachment:

Matthew J. Vander Tuig, P.E.
2013 Valley View Rd.
Columbia, MO 65201
m.vandertuig@mchsi.com

Objective

To use my professional engineering experience to serve the City of Columbia on the Planning and Zoning Commission.

Work Experience

September 2006 to Present
Senior Project Engineer
Trabue Hansen & Hinshaw, Inc.
Columbia, MO
AutoDesk Civil 3D 2009
AutoTurn
StormNET

- Project Engineer:
 - o City of Columbia Fire Station #7
LEED certified project, pervious pavement and bioretention cell.
 - o City of Columbia Fire Station #9
LEED certified project, two bioretention cells.
 - o Summit Technologies Center, Ward Road Extension, Lee's Summit, MO
¾ mile roadway extension, design of storm sewer system to regional detention basin. Served as Construction Manager of Project approving Applications for Payment and Change Order Requests.
 - o Summit Technologies Center, Preliminary Development Plan, Lee's Summit, MO
Completed master planning for all infrastructure within the development for City of Lee's Summit's Preliminary Development Plan process.
 - o Hydraulic Analysis of Katy Trail bridges over Moniteau and Little Femme Osage
Hydraulic analysis to ensure no rise with proposed improvements and scour analysis.
 - o Fire Station #1 and #2 in Holts Summit, MO
Site Civil for both and septic system design for Fire Station #2
 - o Boone Hospital Center - Patient Tower, Columbia, MO
LEED certified project, pervious pavement and five bioretention cells with underground storage tank collecting roof runoff for irrigation needs.
 - o Discovery Ridge Infrastructure Design, Columbia, MO

Design of storm sewer, sanitary sewer, and telecommunications duct bank. Includes a sanitary sewer lift station and force main design to serve initial 7 lots of Discovery Ridge.

- Project Manager:
 - o City of Columbia School Board, Columbia Area Career Center Expansion, Columbia, MO
 - o Missouri Department of Conservation, Central Regional Office, Columbia, MO

April 2005-September 2006

Project Engineer

Boone County Public Works Department

Design and Construction Division, Columbia, MO

AutoDesk Landdesktop 2006

AutoDesk Raster Design 2006

ArcGIS 9.2

Culvert Master, Flow Master

HEC-RAS

- Supervised 3 employees: Engineering Technician, Surveyor, and Right of Way Agent.

- Completed numerous pipe sizing for Maintenance Division's pipe replacement projects.

- Completed Design and Construction Projects including:

Smith Hatchery Road - 10' diameter CMP with 15' headwall/retaining wall adjacent to roadway.

Callahan Creek Road - Precast 12' X 4' Box Culvert to replace existing CMP.

Porter Road - New Low Water Crossing constructed over new pipe arches to address flooding section of roadway.

Green Road - Low Water Crossing installation replacing existing wood deck bridge.

- Design and Construction Projects underway to be bid out by the end of July:

Thomas Hill - Low Water Crossing installation consisting of concrete slab over existing polycoated CMPs.

Thomas Hill Bridge - Galvanized Steel Plate Arch Bridge Structure to replace triple barrel 8' diameter CMPs.

Tucker School Bridge - Precast Slab Bridge to replace triple barrel 7' diameter CMPs.

- Assumed some duties of the Manager of Design and Construction for the last two months while the County was in the process of hiring another, including request for proposals, project management of consultant design projects such as McBaine Bridge, Sunrise Estates, Lake of the Woods Phase II, Georgetown Subdivision, Boone Industrial Park and other in-house design projects.

- Managed traffic complaints from residents, setting priority for appropriate fixes and designing signage plans. Began practice of addressing signs within paving projects to ensure existing sign placement was in accordance with MUTCD, utilizing ArcPad and GPS for designing sign plans in the field and adding them to County's GIS system.

- Pushed for Public Works to utilize county's GIS system and worked with GIS department to create a real-time link between Public Work's asset management software and layers within County's GIS system.

- Helped organize summer interns to collect all cross road culverts using GPS for asset management.

April 2004-February 2005

Self Employed

P.E. License transferred to MO jurisdiction

- Completed AutoCAD work for RFP documents for ongoing sewer projects for the Florida Keys Aqueduct Authority.

- Provided consulting services to the Florida Keys Aqueduct Authority's engineering staff regarding AutoCAD, ESRI's ArcGIS software, and their file management software.

March 2002-April 2004

Distribution System Engineer

Florida Keys Aqueduct Authority

Design Division/Engineering Department, Key West, FL

P.E. License Obtained

AutoDesk Map 2002

AutoDesk Raster Design 2002

ArcGIS 8.3

Windows Office 2004

- Completed distribution upgrade design projects, water main extensions, and reviewed technicians work on commercial and residential development for assessing charges for new services and sizing water mains, meters and need for backflow prevention.
- Managed company's GIS system including budgeting, request for proposals, and technical support/additions, expanding it from a stand-alone computer to the company's existing network.
- Started work on asset management by collecting water meters locations using GPS.
- Worked closely with newly created sewer department using GIS for analyzing sewer districts using property appraiser information from land base data from the County.

August 2001-March 2002

Engineering Technician

Florida Keys Aqueduct Authority

Design Division/Engineering Department, Key West, FL

- Assessed charges for commercial and residential development for new services and sizing water mains, meters and need for backflow prevention.
- Assisted in water distribution upgrade projects.

February 2001 - July 2001

Civil Engineer III - Project Studies Specialist

Illinois Department of Transportation

In-House Unit/Project Studies/Bureau of Programming, Schaumburg, IL

- Started work on four projects with design approvals scheduled for the end of the year, one of which included three closely spaced intersections with signal timing problems and poor progression through the intersections at peak hours of the day. Left for Key West before they were completed.

2000-February 2001

D.A.T.E. Engineer III

Illinois Department of Transportation

Geometrics Unit/Project Studies/Bureau of Programming, Schaumburg, IL

Highway Capacity Software, version 3.2

Passer III-90 (diamond interchange progression analysis)

Microstation (CADD)

Completed in the Chicago Metropolitan area:

- Completed reviews of Traffic Impact Studies, Intersection Design Studies, and Preliminary Geometrics.
- Completed Capacity Analysis for numerous signalized intersections, 4-way stop controlled intersections, 2-way stop controlled intersections, basic freeway sections, and ramp terminal sections.
- Studied the possibility of funding a potential safety project based on the projected benefit of the project versus the cost of completion at an intersection with a high accident rate.
- Completed the "Fundamentals of Geometric Design" class in the Program Development Technical Training series.

1998-2000

D.A.T.E. Engineer I & II

Illinois Department of Transportation
Traffic Systems Center/Bureau of Traffic, Oak Park, IL
Completed in the Chicago Metropolitan area:

- Daily controls over I.T.S (Intelligent Traffic Systems), including changeable message signs, ramp metering controls, and incident detection.
- Assisted in the preparation of plans, specifications, and estimates for I.T.S's replacement equipment for two milling and resurfacing projects and a reconstruction project on major Interstate Routes.

1997-1998

Engineering Aide I, Surveying

City of Columbia, Public Works Department, Columbia, MO

- Surveying, including construction staking and topography surveying of city streets, storm water drainage structures, and sanitary sewer systems.

1993-1996 (Summers & Christmas breaks)

Civil Engineering Intern

Missouri Department of Transportation, Jefferson City, MO

Education

1993-1997

B.S. in Civil Engineering

University of Missouri, Columbia, MO

EIT status obtained

1992-1993

Engineering

Calvin College, Grand Rapids, MI

Community Activities

Columbia Civic Orchestra and 9th Street Philharmonic

References

John Huss, P.E., Civil Design Team Leader, Trabue Hansen & Hinshaw, Inc.

Don Abell, P.E., Emery Sapp & Sons, Previous Manager of Design and Construction Division at Public Works

Info Accurate: Yes

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