



CASE STUDY

URBAN CONSTRUCTION PROJECT EMPLOYS FODS TO MINIMIZE VEHICLE TRACKOUT

BACKGROUND

In response to rapid urban expansion, The Opus Group (Opus) began construction of its third multi-family development in Denver’s Jefferson Park neighborhood. 1919 at Mile High Apartments is a 12 story, 277 unit development that will offer a range of high-end studio, one-bedroom and two-bedroom apartments. Occupying 363,000 square feet, the luxury high rise will cater to working young professionals due to its close proximity to downtown Denver providing tenants with access to business, retail, entertainment, and transportation. There is an above-grade parking structure with 288 spaces and bike storage, two clubrooms and interior/exterior rooftop space. In addition, 5 parks are located within 2.3 miles of the new high rise, as well as Landry’s Downtown Aquarium, Children’s Museum of Denver, and Centennial Gardens.

Opus Group is the developer, design-builder, interior designer, architect, structural engineer, and contractor for 1919 at Mile High Apartments. The national family-run firm is comprised of commercial real estate developers, and construction and design companies headquartered in Minneapolis. Located at 1919 Mile High Stadium Circle in Denver, the development continues around varied topography and near to features including the I-25 interstate and the South Platte River directly east, Empower Field to the south, Jefferson Park neighborhood to the north and west and Turntable Apartments located north of the project. The project is expected to be completed in March of 2022.

CHALLENGE

With a long track record of major urban construction projects, the Opus Group is well informed about the industries’ best management practices for stormwater management. This current project is located within the South Platte Floodplain which contains non-permeable clay that easily erodes, and requires effective erosion and sediment control practices to comply with the NPDES stormwater permit program. Before breaking ground during the initial phases of the project, a stabilized construction entrance needed to be installed to prevent debris and sediment from being tracked onto the active roadways which can be washed down storm drains into the nearby South Platte River. In addition, tracked debris can pose hazards to vehicles traveling on the roadways which can experience high traffic during events at Empower Field Stadium.





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SOLUTION

Opus Group implements FODS to protect water quality, minimize erosion and stormwater runoff, and keep construction debris and contaminants onsite. The modular FODS system was configured to meet the requirements for the expected traffic and turning radius at each egress point. The system enables effective trackout mitigation for construction vehicles entering the high traffic roadways border the site. FODS Reusable Construction Entrance System are installed on the three entrances which were used throughout the projects phases. One entrance borders the building, level with the first floor on Bryant Street where traffic also exits from Interstate 25. The second entrance was placed on a slope that exited into Empower Field Stadium parking lot. The third and main construction entrance enters from uphill near the third story of the high rise on Mile High Stadium Circle. This entrance was permanent throughout the duration of the project.

FODS PREMANUFACTURED VEHICLE TRACKING

FODS Premanufactured vehicle tracking pads are composed of a single layer of HDPE formed into pyramids on the surface. As vehicles pass over the pyramids tires are deformed causing sediment and construction debris trapped inside the treads to loosen and collect around the base of the pyramids



before it can leave the worksite. The system is a modern and effective BMP which can be reused on multiple projects helping to reduce waste and emissions.

Individual mats measure 12' in width and 7' feet in the direction of travel and are designed to be linked together to form a single lane for exiting traffic. Common configurations can be installed in under 30 minutes. Mats effectively minimize tracking out of construction mud, sediment, and debris and can easily be refreshed within minutes with a broom attachment on a skid steer or manually with a FODS shovel that's designed to fit between pyramid rows. With a lifespan of ten plus years, FODS are effective for the long term and can be reused on many projects. FODS continues to assist Opus with construction debris mitigation as they complete the 1919 at Mile High high rise.

ABOUT FODS, LLC.

Based in Englewood Colorado, FODS Trackout Control System replace ineffective and costly traditional rock stabilized construction entrances, saving you valuable time and money. Our proprietary mat design works to effectively remove mud and sediment from your vehicle tires without damaging the tire or the ground's surface.