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新乡至晋城高速公路是连通豫、晋的重要通道，其中块村营至营盘村段线路全长 69.8 km，桥隧比 45%。该段线路起、终点高差较大，其中新庄枢纽至终点段直线距离 7 km，高差达 780 m。为减小纵坡、克服高差，采用螺旋展线方式，展线后形成 3 层立体螺旋隧道群及多处桥隧相接段。隧道最小曲线半径 730 m；柳园隧道与轿顶山隧道交叉点垂向距离约 160 m，韩口隧道与南马鞍隧道交叉点垂向距离约 340 m。隧道群经过轿顶山和万仙山 2 个景区，对环保要求高；隧址区地质构造复杂，存在断层破碎带、岩爆、涌水、岩溶等多种不良地质，隧道施工难度大，风险等级高。该项目由河南省交通规划设计研究院股份有限公司设计，预计 2021 年贯通。

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