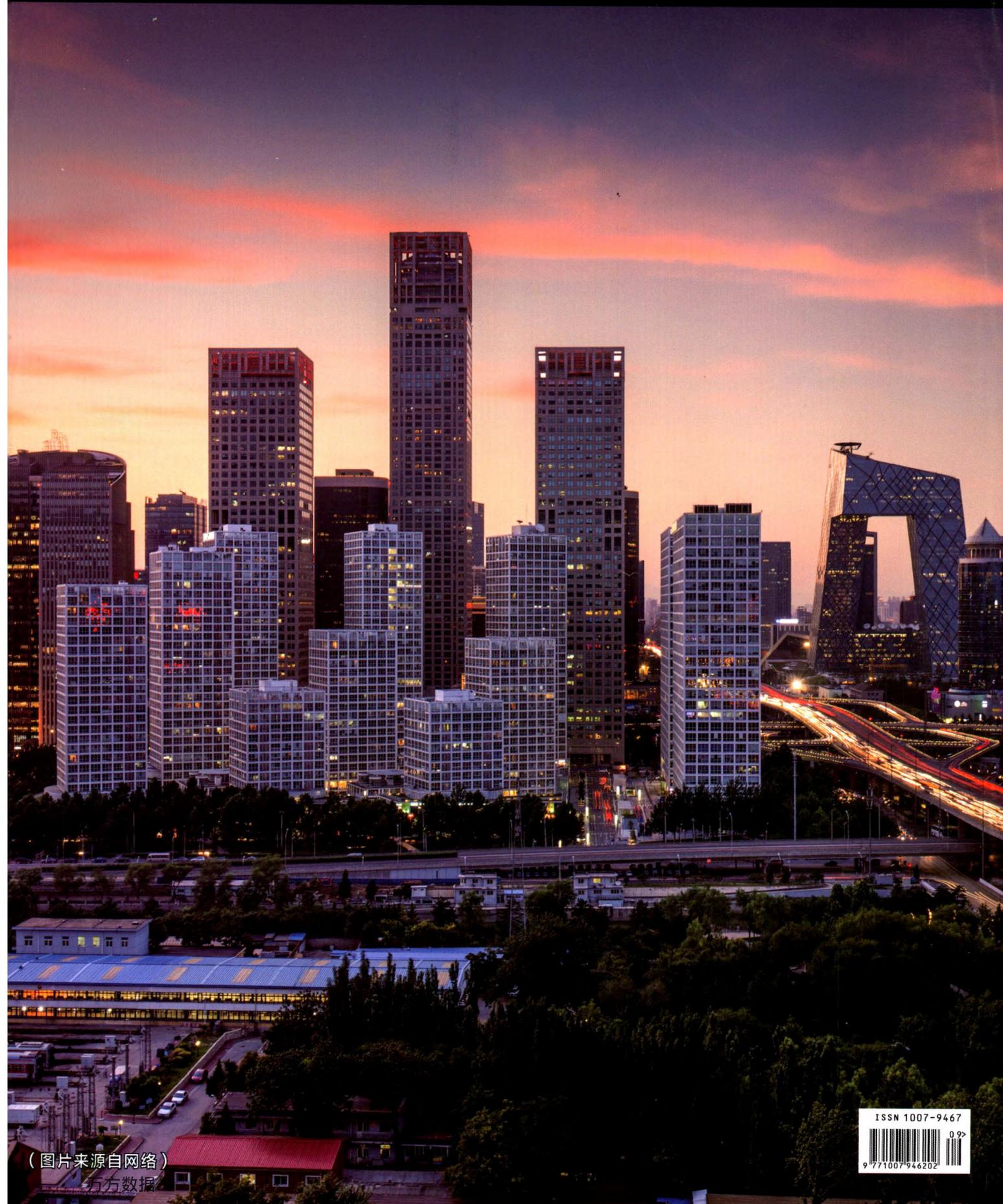


Q K 2 0 1 8 2 7 4



工程建设与设计

办: 国家机械工业局工程建设中心 中国机械工业勘察设计协会 中国中元国际工程有限公司 CN 11-3914/TU 2020年第05月上 总第431期



(图片来自网络)

万方数据



动态资讯

- 01 “住建部核准2020年度第三批建设工程企业资质延续名单”等信息9则

建筑与结构设计

- 03 某既有多层住宅增设电梯工程分析
(黄斯拜, 李伟龙, 李东彬, 陈艳华, 冯禄, 邓曙光)
07 羊马河煤矿不均匀填土场地宿舍的设计 (刘彦东)
10 高层坡地建筑基础嵌固可行性论证分析 (陈超逸)
12 装配式办公建筑设计的思考与实践 (郭纯)
15 伸臂桁架简化模型滞回曲线的模拟研究 (李菁)
17 传统建筑的现实价值——以湖南传统建筑为例
(向显军)
21 火力发电厂结构检测鉴定与加固方法 (徐海龙)
23 预埋件计算方法存在的问题及解决方法 (符旭晨)
26 钢筋混凝土高层结构设计的常见问题分析 (骆继龙)
29 型钢混凝土框架结构优化设计方法研究
(杨仲坡, 马云昌)
32 减隔震支座在某大型不规则结构中的应用研究
(郑晗, 范进, 陈彦北)

基础工程设计

- 35 桩承式挡墙在软土路基中的应用及优化设计 (张明伟)
37 高速公路边坡加固处治中抗滑桩设计分析
(李中奎, 许涵)
40 长短桩筏板复合地基现场测试研究 (陈哲光)
46 房屋建筑工程中的地基处理技术探析 (周帅)
48 杂货码头防洪堤地基加固技术 (章啸)

公用工程设计

- 51 关于电气自动化在智能建筑中的应用探讨与核心探寻
(韩飞)
53 某通用机场给排水及消防设计 (曾秋生)
56 地铁车站活塞风机启动电压暂降研究 (邵明瑞)
59 建筑电气设计节能的原则及途径探究
(衣光照, 王磊鑫)
61 药厂洁净室暖通空调关键性设计分析 (刘权)

- 64 暖通空调设计中地源热泵实践 (孙宝红)
66 太阳能热水系统在建筑给排水设计中的应用 (雍小龙)
68 装配式住宅建筑给排水管线的设计探讨 (胡青芳)

市政·交通·水利工程建设

- 71 南宁地铁2号线弓网拉弧打火原因分析与改善措施
(向伟彬, 王亮)
73 山区高速公路线路设计的常见问题及解决对策研究
(李龙骄, 陈龙)
75 公路路基施工厚度无损检测技术研究 (史建明)
78 某河流水生态修复工程植物种植水位探讨
(陈巧红, 耿川)
80 高速公路养护机械配置管理策略 (冯韶晖)
83 粤西岩溶区桥梁桩基综合勘察技术的应用
(姜国正, 秦伟)
86 GPS-RTK技术在港口码头测量中的应用 (沈相儒)
88 海洋工程领域海工高性能混凝土配合比设计及质量控制
研究 (刘剑钊)
91 新建斜井上跨既有铁路隧道的设计与应用 (王汉晨)
93 “海绵城市”在市政道路设计中的应用价值研究
(徐蕾蕾)
96 公路桥梁中大跨度桥梁设计研究 (隋春来)
98 铁路斜拉桥梁防雷接地设计分析 (孙汝杨)
101 高速公路箱梁在丘陵地区集中预制与运输施工 (杨忠山)
104 斜轴墨卡托投影在水利工程中的应用探讨 (徐建忠)
107 公路养护中的沥青路面预防性养护技术应用实践
(陈奠东)
109 市政道路建设过程中的环境保护 (赵先芝)
112 灌区现代化建设思路探索 (张瑞现)
115 高速公路路基防排结合式防水设计与施工控制要点
(朱小刚)
118 深港中轴TOD导向的站城一体化空间提升 (刘勇)
120 城市河道护岸类型及适用条件探析
(陈浩, 胡超, 史大为)
124 有轨电车异形桥梁上轨道结构力学性能分析 (刘士煜)
130 山区高速公路桥梁设计的安全性及耐久性问题探讨
(王宏)
132 水利水电工程施工导流和围堰技术的应用探讨
(戚侠光, 刘敏)
135 智慧水系统在轨道交通工程中的应用 (夏斌)
138 小区雨水回收利用系统的经济效益分析 (孙剑青)
140 山区公路高边坡勘察设计关键问题探讨 (罗霄)
142 城市道路竖向设计技术要点分析 (蔡建勇)
145 高速公路养护管理模式分析与对策研究 (庞宇)
147 多维度的沥青路面介电常数计算方法研究
(刘涛, 李嘉)

150 高速公路养护施工安全管理研究（武毅男）

工业工程设计

152 建筑电气柴油发电机组的安装与调试研究（王阳）

环境工程设计

155 生态环境监测与遥感技术应用（洪金明，李萌）

157 改善生态住宅声环境的设计措施要点分析（徐飞，吉喆）

160 预拌混凝土生产厂区雨污水净化处理系统研究（罗桃）

能源工程设计

163 LNG接收站燃料气调压工艺的改进与应用

（陈锐莹，张超，姜夏雪，黄欢）

智能与信息化

166 BIM技术在地铁机电安装施工管理中的应用研究

（邓福平）

168 智能预警信息系统在建设项目安全生产管理中的应用

（马瑞）

171 Civil 3D在雄安新区孝义河河口湿地项目场地设计中的应用（李光浩，陈巧红）

173 公路桥粱项目设计阶段BIM技术实践分析（于鹏）

175 基于物联网技术的老旧砖房安全在线监测系统

（阿拉塔，谭晓晶）

178 智慧城市建设中测绘地理信息的应用与发展（周志宇）

工程施工技术

180 FRP管-灌浆料在局部受损混凝土柱中的加固应用

（殷晓三，程林枫，李克）

184 超小净距地铁隧道近距离下穿地下过街通道设计施工技术研究（程龙）

187 先简支后结构连续桥梁施工技术核心探索（桂志武）

189 隧道超浅埋段下穿高速公路关键施工技术（赵永兵）

192 隧道软弱围岩开挖技术（陈喜群）

195 高支模施工技术在铁路土建工程中的应用（马刚）

198 塔冠钢结构施工技术措施（刘鑫，朱德伟）

200 钢背楞竖向模板加固施工技术在建筑工程中的应用（刘宝山，张洋）

203 集料含泥量对沥青混合料水稳定性影响探究（程景芳）

206 工业厂房钢结构吊装工程施工及安全技术（文龙）

208 土建基础施工中深基坑支护施工技术应用（刘腾）

210 公路工程重点环节的关键施工技术研究（刘俊）

213 道路桥隧工程施工中难点及改进措施分析（李伟）

215 基坑支护工程项目中的三轴水泥搅拌桩施工技术（邢孝立）

218 安海湾特大桥主桥超高悬浇0#块支架方案设计

（梁宏顺，张政，何善美）

222 某特大桥水中墩施工难点分析及主要应对技术措施

（朴龙燮）

225 提高混凝土结构注浆堵漏质量的有益探索

（易盛，廖翔鹏）

227 玄武岩地层有盖重及裸岩无盖重固结灌浆技术研究

（顾建，张天力，陈丹）

230 建筑电气工程低压电气安装施工要点讨论

（仲崇红，安晓清，王琳）

232 公路桥粱施工中软土地基施工技术要点分析（姜会玲）

235 公路工程路基土石方施工技术探讨（许志国）

237 对路桥施工中软土路基的施工技术重点探究（闫波）

239 高地应力隧底隆起成因分析及治理预防对策探讨

（赵宏博）

242 24m长废旧混凝土方桩拔除施工技术（郭成林）

245 结合实例对建筑暖通安装施工技术相关问题的探讨

（任兵）

247 水利工程中河道堤防施工技术研究（肖霖）

250 公路深基坑工程中围护与支撑施工工艺及质量控制

（俞扬斌）

253 公路施工中软土路基的施工技术处理分析（袁丰斌）

255 建筑面材非均质拼缝的数学逻辑与基础规则（刘昌翰）

工程项目管理

258 高校基建项目设计管理探析——以某图书馆项目为例

（邢杰）

263 事故致因链在港口与航道工程安全管理中的应用

（董行）

266 高速公路双连拱隧道施工信息化管理技术探析（李伟）

268 电力基建工程管理中常见问题及改进措施研究

（王志军）

271 地铁生产安全管控措施及其应用效果（孙哲）

273 饰面清水混凝土施工技术及质量控制

（任清波，宋雪峰）

276 公路隧道施工安全风险评价与安全管理策略（杨荣）

279 水电站电气运行管控的强化方案与实施要点分析

（杨天煜）

282 公路桥粱养护管理的现状及对策（张亮，崔立超）

285 水利工程管理信息系统运用研究（李宝亭）

287 甘肃陇东地区高速公路造价主要特点和控制措施（刘晓冬，王亚奇，王莉）

290 公路工程建设造价控制与管理分析（左雅萍）

292 水利工程施工技术质量管理策略探讨

（高锐，李渊，章凯）

295 建筑施工企业的合同管理与风险控制（王英燕）

297 悬索桥主缆架设施工中存在的问题与优化方案（付琼）

300 水利工程管理运行中存在的问题与解决措施（王广昌）

302 试论水利施工中水闸施工的管理措施（李斌）

INFORMATION

- 01** "The Ministry of Housing and Urban-Rural Development Approves the List of the Third Batch of Construction Enterprise Qualification Extension in 2020" Etc. 9

Architectural and Structural Design

- 03** Case Analysis of Adding Elevators to An Existing Multi-Storey Residence (HUANG Si-bai, LI Wei-long, LI Dong-bin, CHEN Yan-hua, FENG Lu, DENG Shu-guang)
- 07** Design of Dormitory on Uneven Filling Site in Yangmahe Coal Mine (LIU Yan-dong)
- 10** Feasibility Analysis of Foundation Embedding in High-Rise Slope Buildings (CHEN Chao-yi)
- 12** Consideration and Practice of Assembly Office Architecture Design (GUO Chun)
- 15** Simulation Study on Simplified Model Hysteresis Curve of Outriggers Truss (LI Jing)
- 17** The Realistic Value of Traditional Buildings—Taking Hunan's Traditional Buildings as An Example (XIANG Xian-jun)
- 21** Detection Appraisal and Reinforcement of Thermal Power Plant Structure (XU Hai-long)
- 23** Problems and Solutions of Pre-EMBEDDED Parts Calculating Method (FU Xu-chen)
- 26** Analysis of Common Problems in Design of Reinforced Concrete High-Rise Structures (LUO Ji-long)
- 29** Research on Optimum Design Method of SRC Frame Structure (YANG Zhong-po, MA Yun-chang)
- 32** Research on the Application of Isolation Bearing in A Large Irregular Structure (ZHENG Han, FAN Jin, CHEN Yan-bei)

Engineering Design of the Ground

- 35** Application and Optimization Design of Pile Supported Retaining Wall in Soft Soil Subgrade (ZHANG Ming-wei)
- 37** Design and Analysis of Anti Slide Pile in Highway Slope Reinforcement (LI Zhong-kui, XU Han)
- 40** Study on Field Test of Long and Short Pile Composite Foundation (CHENG Zhe-guang)
- 46** Analysis on Foundation Treatment Technology in Building Construction Engineering (ZHOU Shuai)
- 48** Foundation Reinforcement Technology for Flood Embankment Bank of General Cargo Wharf (ZHANG Xiao)

Public Utilities Design

- 51** Discussion on the Application and Core of Electrical Automation in Intelligent Building (HAN Fei)
- 53** Water Supply and Drainage and Fire-Fighting Design of A General Aerodrome (ZENG Qiu-sheng)
- 56** Study on Starting Voltage Sag of Piston Fan in Subway Station (SHAO Ming-rui)
- 59** Principle and Approach of Energy Saving in Building Electrical Design (YI Guang-zhao, WANG Lei-xin)
- 61** Key Design Analysis of HVAC in Clean Room of Pharmaceutical Factory (LIU Quan)
- 64** Practice of Ground Source Heat Pump in HVAC Design (SUN Bao-hong)

- 66** Application of Solar Water Heating System in Building Water Supply and Drainage Design (YONG Xiao-long)
- 68** Design Discussion on the Water Supply and Drainage Pipeline for Assembly Residential Building (HU Qing-fang)

Municipal · Traffic · Water Resources Engineering Design

- 71** Cause Analysis and Improvement Measures of Arc Ignition in Nanning Metro Line 2 (XIANG Wei-bin, WANG Liang)
- 73** Study on Common Problems and Solutions of Highway Expressway Design in Mountainous Areas (LI Long-jiao, CHEN Long)
- 75** Research on Non-Destructive Testing Technology for Construction Thickness of Highway Subgrade (SHI Jian-ming)
- 78** Discussion on Planting Water Level of A River Water Ecological Restoration Project (CHEN Qiao-hong, GENG Chuan)
- 80** Highway Maintenance Machinery Configuration Management Strategy (FENG Shao-hui)
- 83** Application of Comprehensive Investigation Technology for Bridge Pile Foundation in Karst Area of Western Guangdong Province (JIANG Guo-zheng, QIN Wei)
- 86** Application of GPS-RTK Technology in Port Measurement (SHEN Xiang-ru)
- 88** Study on Mix Ratio Design and Quality Control of High Performance Concrete in Marine Engineering Field (LIU Jian-zhao)
- 91** Design and Application of Existing Railway Tunnel over New Inclined Shaft (WANG Han-chen)
- 93** Research on the Application Value of "Sponge City" in Municipal Road Design (XU Lei-lei)
- 96** Design Research on the Highway Bridge with Large Span (SUI Chun-lai)
- 98** Design Analysis of Lightning Protection and Grounding for Railway Cable-Stayed Bridge (SUN Ru-yang)
- 101** Centralized Prefabrication and Transportation of Highway Box Girder in Hilly Area (YANG Zhong-shan)
- 104** Application Discussion on the Oblique Axis Mercator Projection in Water Conservancy Project (XU Jian-zhong)
- 107** Application of Preventive Maintenance Technology for Asphalt Pavement in Highway Maintenance (CHEN Dian-dong)
- 109** Environmental Protection in the Construction of Municipal Roads (ZHAO Xian-zhi)
- 112** Exploration on the Modernization of Irrigation Area (ZHANG Rui-xian)
- 115** Anti-Discharge Combined Waterproof Design and Key Points of Construction Control in Highway Subgrade (ZHU Xiao-gang)
- 118** The Promotion of Station City Integration Space Guided by Mid Axis TOD in Shenzhen and Hong Kong (LIU Yong)
- 120** Discussion on the Types and Applicable Conditions of Urban River Revetment (CHEN Hao, HU Chao, SHI Da-wei)
- 124** Analysis of Mechanical Properties of Track Structure on Skew Bridges of Tram (LIU Shi-yu)
- 130** Discussion on the Safety and Durability of Mountain Highway Bridge Design (WANG Hong)
- 132** Application of Diversion and Cofferdam Technology in Water Conservancy and Hydropower Engineering Construction (QI Xia-guang, LIU Min)
- 135** Application of Intelligent Water System in Rail Transit Engineering (XIA Bin)
- 138** Economic Benefit Analysis of Rain Water Recycling System in Residential Area (SUN Jian-qing)
- 140** Discussion on Key Problems in Investigation and Design of High Slope of Mountain Road (LUO Xiao)
- 142** Analysis on the Technical Points of Vertical Design of Urban Road (CAI Jian-yong)
- 145** Analysis and Countermeasure Research on Expressway Maintenance Management Mode (PANG Yu)
- 147** Research on Calculation Method of Dielectric Constant of Multi-Dimensional Asphalt Pavement (LIU Tao, LI Jia)
- 150** Study on Safety Management of Expressway Maintenance Construction (WU Yi-nan)

Industrial Engineering Design

- 152** Research on the Installation and Commissioning of Building Electric Diesel Generator Set (WANG Yang)

Environment Engineering Design

- 155** Application of Remote Sensing Technology in Ecological Environment Monitoring (HONG Jin-ming, LI Meng)
- 157** Analysis on the Key Points of the Design Measures to Improve the Acoustic Environment of Ecological Residence Residence (XU Fei, JI Zhe)
- 160** Study on Purification and Treatment System of Rainfall and Sewage in Premixed Concrete Production Plant (LUO Tao)

Energy Engineering Design

- 163** Improvement and Application of Fuel Gas Pressure Regulating Process in LNG Receiving Terminal (CHEN Rui-ying, ZHANG Chao, JIANG Xia-xue, HUANG Huan)

Intelligentization and Informatization

- 166** The Application of BIM Technology in Construction Management of Electromechanical Installation of Subway (DENG Fu-ping)
- 168** Application of Intelligent Early Warning Information System in Safe Production Management of Construction Project (MA Rui)
- 171** Application of Civil 3D in Site Design of Xiaoyi River Estuary Wetland Project in Xiong'an New Area (LI Guang-hao, CHEN Qiao-hong)
- 173** BIM Technology Practice Analysis in Design Stage of Highway Bridge Project (YU Peng)
- 175** Online Security Monitoring System for Aging Brick Buildings Based on the Internet of Things Technology (A La-ta, TAN Xiao-jing)
- 178** Application and Development of Surveying and Mapping Geographic Information in Smart City Construction (ZHOU Zhi-yu)

Construction Technology

- 180** Application of FRP Tube and Grout Material for Strengthening Reinforced Concrete Column with Local Damage (YIN Xiao-san, CHENG Lin-feng, LI Ke)
- 184** Study on the Design and Construction Technology of Ultra Small Clear Distance Subway Tunnel Passing Through the Underground Passage in A Short Distance (CHENG Long)
- 187** Discussion on the Core of Construction Technology for Continuous Bridges with Simply Supported-Continuous (GUI Zhi-wu)
- 189** Key Construction Technology of Super Shallow Buried Section of Tunnel Underpassing Expressway (ZHAO Yong-bing)
- 192** Tunneling Technique for Soft Surrounding Rock (CHEN Xi-qun)
- 195** Application of High-Branch Mould Construction Technology in Railway Civil Engineering (MA Gang)
- 198** Technical Measures of Steel Structure Construction of Tower Crown (LIU Xin, ZHU De-wei)
- 200** The Application of the Vertical Formwork Reinforcement Technique in the Construction Engineering (LIU Bao-shan, ZHANG Yang)
- 203** Study on Influence of Aggregate Mud Content on Water Stability of Asphalt Mixture (CHENG Jing-fang)
- 206** Steel Structure Hoisting Engineering Construction and Safety Technology of Industrial Plant (WEN Long)
- 208** Application of Deep Foundation Pit Support Construction Technology in Civil Foundation Construction (LIU Teng)
- 210** Research on Key Construction Technology of Key Links in Highway Engineering (LIU Jun)
- 213** Analysis of Difficulties and Improvement Measures in Road Bridge Tunnel Construction (LI Wei)
- 215** Construction Technology of Three-Axis Cement Mixing Pile in Foundation Pit Supporting Project (BING Xiao-li)
- 218** Design of 0# Block Bracket for Super High Suspension Casting of Main Bridge of An Bay Super Major Bridge (LIANG Hong-shun, ZHANG Zheng, HE Shan-mei)
- 222** Analysis of Difficulties in Construction of Underwater Piers of A Super Large Bridge and Main Technical Measures (PIAO Long-xie)

- 225** A Beneficial Exploration Aimed at Improving the Grouting Plugging Quality of Concrete Structures (YI Sheng, LIAO Xiang-peng)

- 227** Study on Consolidation Grouting Technology of Basalt Strata with Cover Weight and Open Rock Without Cover Weight (GU Jian, ZHANG Tian-li, CHEN Dan)

- 230** Discussion on the Key Points of Low Voltage Electrical Installation in Building Electrical Engineering (ZHONG Chong-hong, AN Xiao-qing, WANG Lin)

- 232** Analysis on Key Points of Soft Soil Foundation Construction Technology in Highway Bridge Construction (JIANG Hui-ling)

- 235** Discussion on Construction Technology of Roadbed Earthwork in Highway Engineering (XU Zhi-guo)

- 237** Research on the Construction Technology of Soft Soil Subgrade in Road and Bridge Construction (YAN Bo)

- 239** Discussion on the Cause of Formation Treatment and Preventive Measures of the Bottom Uplift of High-in-Situ Stress Tunnel (ZHAO Hong-bo)

- 242** Construction Technology of Pulling out 24m Long Waste Concrete Square Pile (GUO Cheng-lin)

- 245** Probe into the Problems Related to the Construction Technology of Building HVAC Installation with Examples (REN Bing)

- 247** Research on River Embankment Construction Technology in Water Conservancy Engineering (XIAO Lin)

- 250** Construction Technology and Quality Control of Retaining and Supporting in Highway Deep Foundation Pit Engineering (YU Yang-bin)

- 253** Analysis on Construction Technology of Soft Soil Roadbed in Highway Construction (YUAN Feng-bin)

- 255** Mathematical Logic and Basic Rules for the Heterogeneous Seams of Building Materials (LIU Chang-han)

Project Management

- 258** Talking About the Design and Management of University Infrastructure Projects—Taking A Library Project as An Example (XING Jie)

- 263** Application of Accident Cause Chain in Safety Management of Port and Waterway Engineering (DONG Hang)

- 266** Analysis on Information Management Technology of Expressway Double Arch Tunnel Construction (LI Wei)

- 268** Research on the Common Problems and Improvement Measures in the Management of Electric Power Infrastructure Projects (WANG Zhi-jun)

- 271** Subway Production Safety Control Measures and Its Application Effect (SUN Zhe)

- 273** Construction Technology and Quality Control of Decorative Fair-Faced Concrete (REN Qing-bo, SONG Xue-feng)

- 276** Safety Risk Assessment and Safety Management Strategy of Highway Tunnel Construction (YANG Rong)

- 279** Strengthening Scheme and Key Points of Implementation of Electric Operation Control in Hydropower Station (YANG Tian-yu)

- 282** The Current Situation and Countermeasures of Highway Bridge Maintenance Management (ZHANG Liang, CUI Li-chao)

- 285** Research on Application of Management Information System for Water Conservancy Project (LI Bao-ting)

- 287** Main Characteristics and Control Measures of Expressway Construction Cost in Longdong Area (LIU Xiao-dong, WANG Ya-qi, WANG Li)

- 290** Analysis of Cost Control and Management in Highway Engineering (ZUO Ya-ping)

- 292** Discussion on Quality Management Strategy of Water Conservancy Project Construction Technology (GAO Rui, LI Yuan, ZHANG Kai)

- 295** Contract Management and Risk Control of Construction Enterprises (WANG Ying-yan)

- 297** Problems and Optimization Scheme in Construction of Main Cable for Suspension Bridge (FU Qiong)

- 300** Problems and Solutions in Water Conservancy Project Management and Operation (WANG Guang-chang)

- 302** Discussion on Management Measures of Sluice Construction in Water Conservancy Construction (LI Bin)



中国中元国际工程有限公司
CHINA IPPR INTERNATIONAL ENGINEERING CO., LTD.



广告

地址：北京市西三环北路5号

邮编：100089

电话：(010) 68458355

传真：(010) 68732688

网址：<http://www.ippr.com.cn>

邮箱：office@ippr.net

标准数据
CN11-3914/TU

ISSN1007-9467
广告许可证号：京海工商广字第8214号 邮发代号：82-847 定价：20.00元/期 480.00元/年