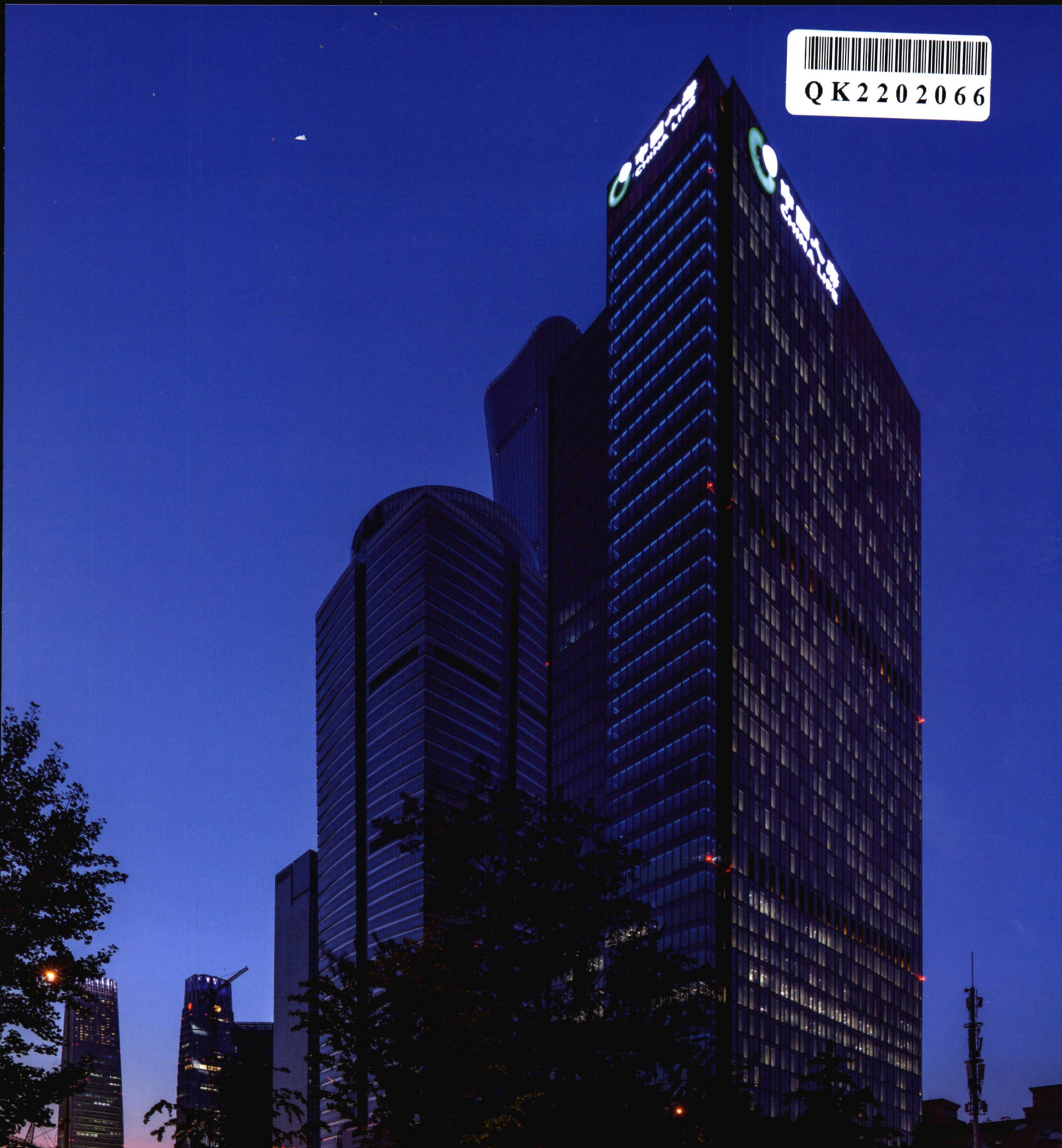




# 工程建设与设计

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 2022 年第01月上 总第471期



CBD核心区Z13-国寿金融中心  
北京市建筑设计研究院有限公司





## 动态资讯

- 01 “住房和城乡建设部在国新办举行的新闻发布会上提出将推动加装电梯、无障碍环境建设”等信息5则

## 建筑与结构设计

- 03 安阳曹操高陵本体保护与展示工程结构设计  
(马智刚, 贾振林, 田文静, 赵晓雷, 孟凡磊)
- 06 高层剪力墙结构底部设置少量框架裙房的设计探讨  
(韩廷, 韩丽君, 高慧升, 张春霞)
- 10 某铁路站房大跨楼盖结构分析设计  
(尹卫军, 余华彬, 张志刚)
- 14 建筑钢结构防火设计分析与研究  
(谈建国, 谈路遥, 金烁)
- 18 类型学视角下山西民居堂屋功能优化研究  
(张瑞衡)
- 21 某影院高大后砌墙结构设计 (熊印生, 刘璐)
- 25 绿色建筑设计理念在建筑设计中的整合与应用分析  
(刘海)
- 28 “流动建筑”在宁波城市闲置土地上的临时性开发策略  
(章金刚)
- 31 博物馆建设选址及筹建工作探讨 (袁强亮, 刘畅)
- 35 环境艺术设计中融入东西方风格探析 (王一鸣)

## 基础工程设计

- 38 岩土工程地基处理的常用方法及应用 (程弋然)
- 41 建筑工程施工中软土地基处理技术的应用  
(刘红健)

## 公用工程设计

- 44 内区房间通风换气智能控制系统应用  
(宗兆春, 冯泽龙, 王广齐, 魏志立, 杨文玉)

## 市政·交通·水利工程设计

- 47 盾构接收对地铁车站接收端的影响研究  
(韦晓霞, 张英智, 赵永军, 阮雷)
- 50 车辆对桥梁伸缩缝冲击效应的实验研究  
(吕俊平, 韩凌霞, 丁勇)
- 53 基于地铁隧道轮廓线内的桩基处理方案对比分析  
(袁战会)
- 56 基于ANSYS的无铺装轨道钢箱梁日照温度场敏感性分析  
(黎泰良)
- 61 西安地裂缝对地铁运营风险及管控措施研究  
(李诚钰, 刘天宁, 杜超, 王华, 贾兴豪)
- 65 基于影响矩阵的斜拉桥成桥索力优化方法分析  
(阴文蔚)
- 69 智慧城市多功能标志标牌杆选型研究  
(王敏, 姚云龙, 任高杰)
- 74 地铁盾构管片渗漏水的施工控制研究 (郝文海)
- 77 斜交框架桥配筋设计 (蒋欢)
- 80 地铁人防工程风道人防设备研究  
(闫梦扬, 尹鹏, 邵玮, 张禹)
- 83 某钢管生产线循环水系统旋流沉淀池的设计  
(闫文琪, 惠娟, 王亚星)
- 86 基于海绵城市的旧工业区改建策略 (李阳)
- 89 高铁车站给排水设计方案分析 (熊青)
- 92 掺玄武岩纤维水稳基层在公路工程中的应用  
(苑艳飞)
- 95 废胶粉改性沥青在公路工程中的应用 (甄建平)
- 98 城市轨道交通安全风险技术管理体系及构建  
(张金亮)

## 工业工程设计

- 101 核主泵试验台工艺系统分析 (陈波)

## 环境工程设计

- 104 某污水厂污泥脱水系统优化设计中的设备选型  
(朱春风, 李士松)

**智能与信息化**

- 108 数值试验在智慧型道路检测中心的创新应用  
(吴晓波, 谭云鹏)
- 111 RPA技术在供电企业中的应用途径  
(尚彦赞, 王钰琦, 李震霖)

**工程施工技术**

- 114 基坑上跨既有地铁隧道施工扰动效应研究  
(郑刚强, 殷洪波, 郭永发, 刘正初)
- 118 灞河富水砂层条件下盾构选型及下穿施工关键技术研究  
(张英智, 韦晓霞, 赵永军, 刘锋涛, 沈富英, 王晓军, 毕肖锋, 阮雷)
- 121 土压平衡盾构河底长距离全断面富水砂层施工技术  
(黄春来, 饶伟)
- 124 超长电梯井道测量控制技术研究及应用  
(李文利)
- 129 地铁盾构区间隧道施工风险的分析与控制  
(朱建勋)
- 132 注浆施工技术在岩土工程项目中的应用  
(戴选锋)
- 135 供热管道穿越岩层水平定向钻施工技术  
(闫永贵)
- 139 钢结构桥梁两种浮拖施工工艺的对比研究  
(刘强华)
- 142 钻孔灌注桩结合高压旋喷桩隔水帷幕在深基坑支护止水工程中的应用  
(朴健)
- 147 安阳曹操高陵保护工程大跨金属屋面施工技术  
(樊超, 田大鹏, 贾振林, 田文静, 孟凡磊, 赵晓雷)
- 150 城市预应力混凝土连续宽箱梁桥设计参数优化  
(何龙)
- 153 小跨径现浇箱梁设计和施工方案优化思路  
(杨益鸣, 李孟晖)
- 156 立体车库钢结构立柱与基础连接施工技术  
(牛玉林)
- 160 公路施工中的路面垫层施工技术  
(韩建丽, 韩建军)
- 163 运河新城48班小学工程土方开挖施工探析  
(王健, 章文杰, 胡汉)
- 166 桥梁空心薄壁高墩柱爬模施工技术研究  
(高恒)

- 169 超宽桥梁桥面铺装的施工质量控制  
(王令虎)
- 173 影响地质雷达隧道衬砌检测精度的原因及解决方法探析  
(张康乔)
- 177 混凝土外加剂研究与制备  
(尚孝振)
- 180 高速公路沥青路面就地热再生施工技术研究  
(寇建国)
- 183 钢筋混凝土桁架式转换层施工技术应用探讨  
(周丽雯)
- 186 高速公路边坡挡土墙防护技术研究  
(杨鹏程)
- 189 桥梁施工中大跨径连续桥梁施工技术的应用分析  
(孙得贵)
- 192 室内绿色健康装修技术研究及实施要点  
(李长春, 郑春, 王定华, 汪洋)
- 195 水利工程堤坝防渗加固施工技术  
(许子福, 杨立兵)

**工程项目管理**

- 198 建筑工程EPC总承包项目风险管理研究  
(钟海荣)
- 201 BIM在城市综合管廊PPP项目管理中的应用  
(崔平, 王继帅, 魏京民, 孙泓辞, 冯强)
- 204 学校工程项目管理模式与目标控制研究  
(陈宁)
- 208 土木工程中的造价管理和控制探究  
(李彦博)
- 211 面向全生命周期的BIM技术在铁路信号系统中的应用研究  
(杜高科)
- 215 建筑工程概预算编制对工程造价的影响与对策  
(李霞)
- 218 基于BIM技术的装配式建筑施工管理研究  
(宋二玮)
- 221 谈地铁车辆段上盖房地产项目的管理  
(周旭磊)
- 224 某公路项目招标管理研究  
(朱洪波)
- 227 建筑工程造价的动态管理控制研究  
(邵玮, 尹鹏, 闫梦扬, 刘静)
- 230 高速铁路40 m箱梁运架一体式定额测定与分析  
(刘天赐)

## INFORMATION

- 01 "At a Press Conference Held by the State Information Office, the Ministry of Housing and Urban Rural Development Proposed to Promote the Installation of Elevators and the Construction of Barrier Free Environment" Etc.5

## Architectural and Structural Design

- 03 Structural Design of Anyang Caocao Gaoling Mausoleum Ontology Protection and Exhibition Project( MA Zhi-gang, JIA Zhen-lin, TIAN Wen-jing, ZHAO Xiao-lei, MENG Fan-lei)
- 06 Design Discussion of a Small Amount of Frame Structure for the Podium at the Bottom of Shear Wall Structure for the Tall Building(HAN Ting, HAN Li-jun, GAO Hui-sheng, ZHANG Chun-xia)
- 10 Design of a Large Span Floor Structure of a Railway Station(YIN Wei-jun, YU Hua-bin, ZHANG Zhi-gang)
- 14 Analysis and Research on Fire Protection Design of Building Steel Structure(TAN Jian-guo, TAN Lu-yao, JIN Shuo)
- 18 Research on the Function Optimization of Central Room of Shanxi Folk Houses from the Perspective of Typology(ZHANG Rui-heng)
- 21 Structural Design for a Movie Theatre's Tall and Wide Post-Build-Walls(XIONG Yin-sheng, LIU Lu)
- 25 Integration and Application Analysis of Green Architectural Design Concept in Architectural Design(LIU Hai)
- 28 Temporary Development Strategy of "Mobile Building" on Urban Idle Land in Ningbo(ZHANG Jin-gang)
- 31 Discussion on Site Selection and Preparation of Museum Construction(YUAN Qiang-liang, LIU Chang)
- 35 Discussion on Blending Eastern and Western Styles into Environmental Art Design(WANG Yi-ming)

## Engineering Design of the Ground

- 38 Common Methods of Geotechnical Foundation Treatment and Its Applications(CHENG Yi-ran)
- 41 Application of Soft Soil Foundation Treatment Technology in Construction Engineering(LIU Hong-jian)

## Public Utilities Design

- 44 Application of Intelligent Control System for Indoor Ventilation(ZONG Zhao-chun, FENG Ze-long, WANG Guang-qi, WEI Zhi-li, YANG Wen-yu)

## Municipal Traffic-Water Resources Engineering Design

- 47 Influence Research of Shield Receiving on Receiving End of Metro Station(WEI Xiao-xia, ZHANG Ying-zhi, ZHAO Yong-jun, RUAN Lei)
- 50 Experimental Analysis on the Impact Effect of the Vehicle on Bridge Expansion Joint(LYU Jun-ping, HAN Ling-xia, DING Yong)
- 53 Comparative Analysis of Pile Foundation Treatment Schemes in Metro Tunnel Contour(YUAN Zhan-hui)
- 56 Sensitivity Analysis of Temperature Field of Unpaved Track Steel Box Girder Based on ANSYS(LI Tai-liang)
- 61 Study on the Risk and Control Measures of Xi'an Ground Fissure to Metro Operation(LI Cheng-yu, LIU Tian-ning, DU Chao, WANG Hua, JIA Xing-hao)
- 65 Analysis of Cable Force Optimization Method Based on Influence Matrix for Cable - Stayed Bridge(YIN Wen-wei)
- 69 Research on the Selection of Multi-Functional Signage Pole in Smart City(WANG Min, YAO Yun-long, REN Gao-jie)
- 74 Study on Construction Control of Leakage of Subway Shield Segment(HAO Wen-hai)
- 77 Reinforcement Design of Skew Frame Bridge(JIANG Huan)
- 80 Research on Air Defense Equipment in Air Duct of Subway Civil Air Defense Projects(YAN Meng-yang, YIN Peng, SHAO Wei, ZHANG Yu)
- 83 The Design of Cyclone Sedimentation Tank for Circulating Water System of a Steel Pipe Production Line(YAN Wen-qi, HUI Juan, WANG Ya-xing)
- 86 A Reconstruction Strategy of Old Industrial District Based on Sponge City(LI Yang)
- 89 Analysis of Water Supply and Drainage Design Scheme of High-Speed Railway Station(XIONG Qing)
- 92 Application of Water-Stabilized Basalt Fiber Base in Highway Engineering(YUAN Yan-fei)
- 95 Application of Waste Rubber Powder Modified Asphalt in Highway Engineering(ZHEN Jian-ping)
- 98 Urban Rail Transit Safety Risk Technology Management System and Construction(ZHANG Jin-liang)

## Industrial Engineering Design

- 101 Analysis on Process System of Nuclear Main Pump Test Stand(CHEN Bo)

## Environment Engineering Design

- 104 Equipments Selection of Optimal Design in a WWTP Sludge Dewatering System(ZHU Chun-feng, LI Shi-song)



**Intelligentize and Informatization**

- 108 Innovative Application of Numerical Experimentation in Intelligent Road Testing Center(WU Xiao-bo, TAN Yun-peng)
- 111 Application of RPA Technology in Power Supply Enterprise(SHANG Yan-yun, WANG Yu-qi, LI Zhen-lin)

**Construction Technology**

- 114 Study on Disturbance Effect Caused by Excavation of Foundation Pit Across Existing Subway Tunnel(ZHENG Gang-qiang, YIN Hong-bo, GUO Yong-fa, LIU Zheng-chu)
- 118 Research on Key Technology of Shield Type Selection and Underpass Construction Under Water-Rich Sand Stratum of Ba River(ZHANG Ying-zhi, WEI Xiao-xia, ZHAO Yong-jun, LIU Feng-tao, SHEN Fu-ying, WANG Xiao-jun, BI Xiao-feng, RUAN Lei)
- 121 Construction Technology of Earth Pressure Balance Shield Tunneling on Long-Distance Full-Section Water-Rich Sand Layer at River Bottom(HUANG Chun-lai, RAO Wei)
- 124 Research and Application of Measurement Control Technology of Ultra Long Elevator Well(LI Wen-li)
- 129 Analysis and Control of Construction Risks of Metro Shield-Driving Interval Tunnels(ZHU Jian-xun)
- 132 Application of Grouting Construction Technology in Geotechnical Project(DAI Xuan-feng)
- 135 Horizontal Directional Drilling Construction Technology for Heating Pipeline Crossing Rock Stratum(YAN Yong-gui)
- 139 Comparative Study on Two Kinds of Floating Towing Construction Technology of Steel Structure Bridge (LIU Qiang-hua)
- 142 Application of Bored Pile Combined with High Pressure Jet Grouting Pile Water-Proof Curtain in Deep Foundation Pit Support and Water-Stop Project(PIAO Jian)
- 147 Construction Technology of Long-Span Metal Roof in Anyang Caocao Gaoling Protection Project( FAN Chao, TIAN Da-peng, JIA Zhen-lin, TIAN Wen-jing, MENG Fan-lei, ZHAO Xiao-lei)
- 150 Optimization of Design Parameters of Urban Prestressed Concrete Continuous Wide Box Girder Bridge(HE Long)
- 153 Research of Optimization of Bridge Design and Construction of Small Span Cast-in-Place Box Girder(YANG Yi-ming, LI Meng-hui)
- 156 Construction Technology of Connection Between Steel Structure Column and Foundation of Three-Dimensional Garage(NIU Yu-lin)
- 160 Pavement Cushion Construction Technology of Highway Construction(HAN Jian-li, HAN Jian-jun)
- 163 Analysis on the Earth Excavation Construction of the 48-Class Elementary School Project in Yunhe New City(WANG Jian, ZHANG Wen-jie, HU Han)
- 166 Study on Climbing Formwork Construction Technology of Hollow Thin-Walled High Pier Column of Bridge(GAO Heng)
- 169 Construction Quality Control of Super-Wide Bridge Deck Pavement(WANG Ling-hu)
- 173 Analysis of the Reasons and Solution of Geological Radar Tunnel Lining Detection Accuracy(ZHANG Kang-qiao)

- 177 Research and Preparation of Concrete Admixture(SHANG Xiao-zhen)
- 180 Research on Geothermal Regeneration Construction Technology for Asphalt Pavement Expressway(KOU Jian-guo)
- 183 Discussion on Application of Construction Technology of Reinforced Concrete Truss Transfer Layer(ZHOU Li-wen)
- 186 Study on Protection Technology of Highway Slope Retaining Wall(YANG Peng-cheng)
- 189 Analysis of the Application Large-Span Continuous Bridge Construction Technology in Bridge Construction(SUN De-gui)
- 192 Research and Implementation Points of Green and Healthy Indoor Decoration Technology(LI Chang-chun, ZHENG Chun, WANG Ding-hua, WANG Yang)
- 195 Construction Technology for Seepage Prevention and Reinforcement of Dams in Water Conservancy Projects(XU Zi-fu, YANG Li-bing)

**Project Management**

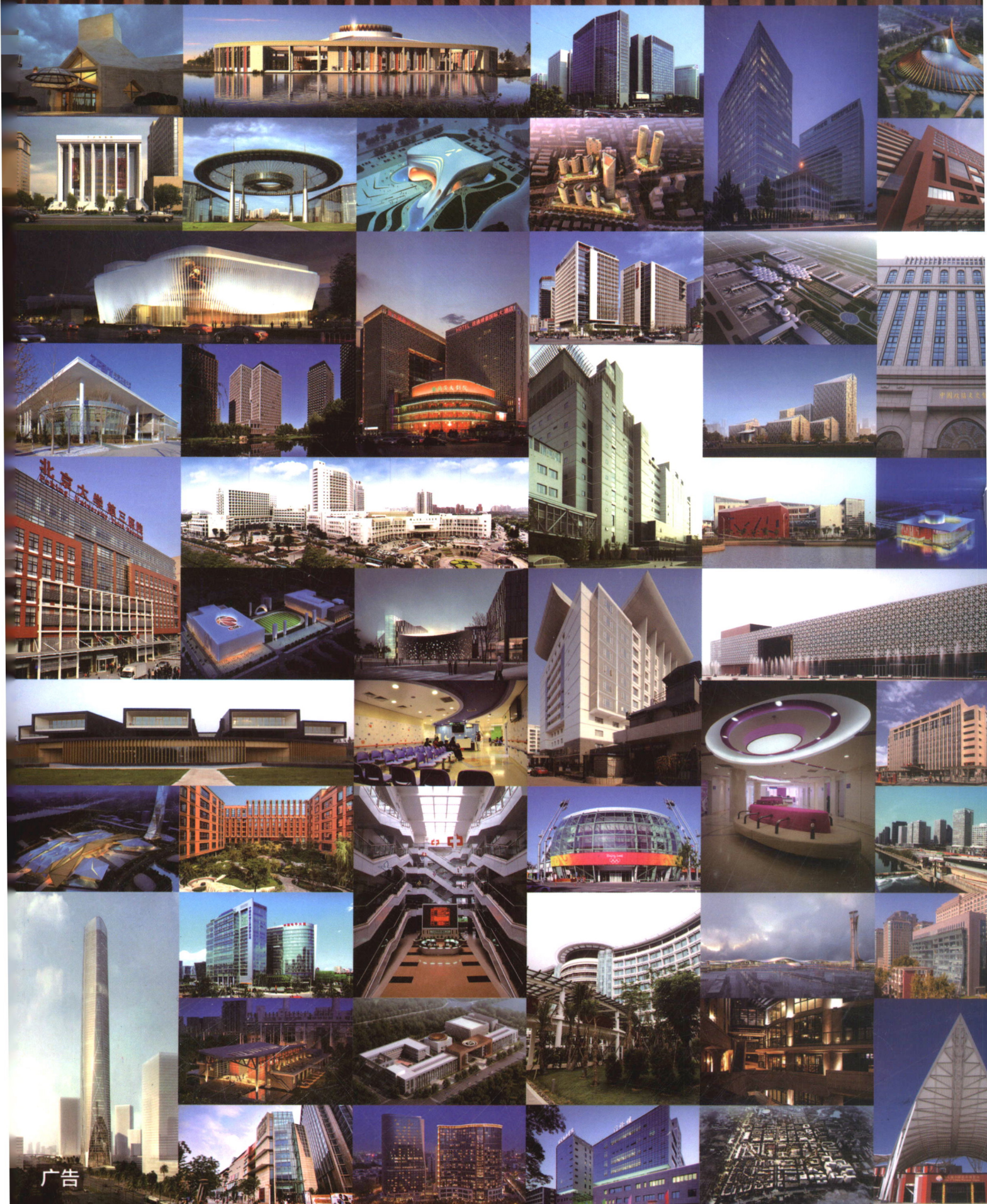
- 198 Research on Risk Management of EPC General Contracting Project(ZHONG Hai-rong)
- 201 The Application of BIM in PPP Project Management of Urban Utility Tunnel(CUI Ping, WANG Ji-shuai, WEI Jing-min, SUN Hong-ci, FENG Qiang)
- 204 Study on School Engineering Project Management Mode and Target Control(CHEN Ning)
- 208 Research on Cost Management and Control in Civil Engineering(LI Yan-bo)
- 211 Application Research of Life Cycle Oriented BIM Technology in Railway Signal System(DU Gao-ke)
- 215 Influence of Construction Budget Preparation on Project Cost and Countermeasures(LI Xia)
- 218 Research on Construction Management of Prefabricated Building Based on BIM Technology(SONG Er-wei)
- 221 Discussion on the Management of Real Estate Project Above Subway Depot(ZHOU Xu-lei)
- 224 Study on Bidding Management of Highway Project(ZHU Hong-bo)
- 227 Research on Dynamic Management and Control of Construction Engineering Cost(SHAO Wei, YIN Peng, YAN Meng-yang, LIU Jing)
- 230 Measurement and Analysis of 40 m Box Girder Transport Frame Integrated Quota for High-Speed Railway(LIU Tian-ci)





# 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](mailto:office@ippr.net)