

# 工程建设与设计



C O N T E N T S

# 动态资讯

07 "住建部公布新一批资质核准名单: 30家企业取得特级资质"等信息12则

#### 访谈

**10** 以人为本,打造新时代建筑设计精品——访广州宝贤华 瀚建筑工程设计有限公司总建筑师丁宁

# 信息化

- 12 2018中国城市建设科学发展论坛召开
- 13 把握时代机遇, 共赢变革未来

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- 40 抗震支吊架地震作用计算方法的适用性研究(赖光书, 丁幼亮,朱浩樑,梁启慧)
- 44 既有办公建筑机电系统节能诊断及改造效益分析(乔振勇,邓文,颜峰,黄渝兰,张红,倪吉)
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- 50 钢筋混凝土建筑的抗震设计要点分析(薛骥明)

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- 58 复杂周边环境基坑工程变形控制技术(章延平)
- 60 人工挖孔嵌岩灌注桩承载力自平衡试验研究(王贵彬,

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- 289 建筑工程监理对工程安全监督管理的探究与实践(谢凡)
- 292 EPC项目成本管理模式研究(舒建平)
- 294 如何有效加强水利施工管理(丁长春)
- 297 对建筑施工企业资质管理的思考与探索(孔委)
- 299 PPP模式下高速公路建设项目的融资风险分析与对策研究(张华,杨芬)
- 302 路桥工程现场施工管理的难点及应对措施(张占霄)
- 304 建筑混凝土裂缝出现的原因及预防管理分析(付盛忠)

#### INFORMATION

07 "Ministry of Housing and Urban-Rural Development announced a new batch of qualification approval list: 30 enterprises have obtained super qualification" Etc. 12

## INTERVIEW

- 10 Elaborate Construction Design for the People
  - ----- Interview with Mr. Ning Ding, Chief Engineer of Guangzhou BXHH Architectural & Engineering Co., Ltd.

#### INFORMATIZATION

- 12 Forum on scientific development of urban construction in China 2018 was held
- 13 Seize the opportunities of The Times to achieve win-win change in the future

#### **FORUM**

- 15 Application of Three-Dimensional Finite Element Numerical Simulation in Stability Evaluation of Mined-out Area
- 19 Application of Integrated Water Management Based on Network Geographic Information Service
- 21 Discussion on Concrete Structure Design of High-rise Building
- 23 The Establishment of 3d Model Based on Digital Photogrammetry and the Exploration of Key Elements
- 25 Design and Management of Prefabricated Building under EPC Mode

#### Architectural and Structural Design

- 27 Practice of Building Structure Design Optimization Method in Housing Structure Design (WANG Shun)
- 30 The Design Technology and System Development of BIM-Based Building Anti-Seismic Support Hanger (CHEN Jia-yao, ZHU Hao-liang, DING You-liang, LIANG Qi-hui)
- 33 Analysis of the Development Trend of Modern Urban Landscape Design (HE Yan, LIAO Yu-sha)
- 35 Application Advantage of Non-Bonded Prestress Technology in Circular Cistern (LU Hong-bo, YANG Chen-guang, ZHANG Lei)
- 38 A Brief Discussion on Precision Engineering Surveying and Its Related Application (ZHANG Zhi-cheng)
- 40 Applicability Research of Seismic Calculation Method for Anti-Seismic Support Hangers (LAI Guang-shu, DING You-liang, ZHU Hao-liang, LIANG Qi-hui)
- 44 Analysis of Diagnosis of Energy Saving and Benefit of Electromechanical System of an Existing Office Building (QIAO Zhen-yong, DENG Wen, YAN Feng, HUANG Yu-lan, ZHANG Hong, NI Ji)
- 47 Consideration of Spatial Planning at County Level (ZHAO Qian-ni)
- 50 Analysis of Seismic Design Points of Reinforced Concrete Buildings (XUE Ji-ming)

#### **Engineering Design of the Ground**

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- 55 Study on Metallogenic Regularity of Polymetallic Deposits in Contact Zone of Dulong Mining Area of Wenshan (LUO Ai-guo)
- 58 Deformation Control Technology of Foundation Pit in Complex Surrounding Environment (ZHANG Yan-ping)
- 60 Self-Balanced Test Study on Bearing Capacity of Manual Digging Rock-Socketed Piles (WANG Gui-bin, CHEN Xue, WANG Fa-xu, WU Xingshou, XU Fu-jian)
- 63 The Treatment Measures of Silt Soft Foundation in Open Caisson Construction Using the Method of Sand Gravel Replacement and Filling Combining with Sand Pile Reinforcement (WEI Chun-lai, LEI Shi-song)
- 65 Deformation Monitoring and Numerical Analysis of Foundation Pit of a Subway Station in Zhengzhou (HU Juan, XIAO Zhao-ran)
- 68 Key Points of the Analysis of Engineering Geological Survey and Hydrogeological Evaluation (HE Shao-sheng)
- 70 Points Analysis of Stable Flow Porous Pumping Test ——Taking the Hole S1CW1 of Changzhou Rail Transit Line 2 as an Example (WU Jing-shu)
- 74 Pre-Dewatering Test of Foundation Pit and Its Influence on Subway Tunnel (LIU Wen-jie, HE Xu-feng)
- 76 Study on the Stability Analysis and Dynamic Design of Highway Excavated Subgrade Slope (QI Yi-bin)

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- 82 Discussion on the Key Points of HVAC Design in High-Rise Buildings (LEI Li-na, LI Guo-wei)
- 84 HVAC Design for Wuxing Building of Qingyang (SHAN Min)
- 87 The Application and Analysis of the 110kV Pre-Installed Substation in the New Energy Power Grid (YANG Li-wei, WANG Li-dan, ZHI Pei)

#### Municipal ·Traffic· Water Resources·Engineering Design

- 90 Research and Implementation of Rapid Modeling of Urban Underground Pipelines in 3DEXPERIENCE Platform (QI Ming, ZHU Xing)
- 93 Research on the Necessity of Setting up a Crossing River Pipeline Standby Channel Based on Failure Probability Analysis (ZHAN Shengwen, REN Wen-ming, ZHANG Jin-yuan)
- 97 Study on the Route Direction of Zambia Eastern Railway Crossing the Nature Reserve (DING Jian-guo)
- 99 System Dynamic Performance Impact Analysis of Existing Railway Base on Adding Second Line of Broad-Gauge Railway (WU Tao)
- 102 Design of an Outdoor Landscape Steel Arch Bridge (TAO Jin-fu, CHEN Ke)
- 105 Study on the Feasibility Design of Rail Transit (WU Yan)
- 107 Effective Strategy for Constructing Transportation System of Transportation Integration (JIANG Yao-wu)
- 109 Analysis of Several Design Interface Problems Between Municipal Matching Specialty and Subway Specialty (JIANG Zhi-hui)
- 112 Analysis of the Factors Needing to Consider in the Railway Line Design and its Development Discussion (KE Rui-yong)
- 114 Discussion on the Design Principle and Method of Three-Dimensional Visualization of Railway Lines (LfU Chun-hua)
- 117 The Application of Two Enlarged Bottom AM Pedestal Pile in Airport Construction Above the Railway (XIA Yong)
- 120 Reflection on the Practice of Urban Road Reconstruction Design (YUAN Jie)
- 123 Construction and Analysis of Urban Water Supply and Drainage Pipeline System Based on the Concept of Sponge City (CUI Qian-hua)
- 125 A Design Framework for Practical Seismic Performance of Highway Bridges Based on the Probability (YAN Yan, ZHANG Yong-qiang)
- 128 Design and Construction Technology of Bolting and Shotcreting Support for Slope (Ll Xiang-fu)
- 130 Research on Improving Traffic Congestion Based on the Refined Design Concept of Road Traffic (TAO Xue-qian)
- 133 Study on the Key Problems in the Course of Road and Bridge Reinforcement (ZHU De-qing)

- 135 Study on Treatment Method of Poor Foundation in Water Conservancy and Hydropower Engineering Construction (GAO Feng)
- 138 Study on the Application Value of BIM Concept in Municipal Engineering Design (ZHANG Jun-shen, YANG Zhen-wen, SUN Yi-yin)
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- 144 The Research Framework Construction of the Key Points of Durability Design of Segment Prefabricated Assembled Bridges (YAN Jun)
- 146 The Application of Coordinate Inverse Algorithm in the Construction of Ballasting-Track Surveying (WANG Zhen)
- 149 Study on Track Retest Technology of High Speed Railway (HAO Guangming)
- 151 Study on Characteristics and Control Technology of Railway Subgrade Water Damage (ZHAO Long-tao)
- 154 Study on the Application of Fine Adjustment Technology for High Speed Railway (LI Hua-ri)
- 156 The Problems and Solutions of Urban River Regulation Planning (PENG Hu-yue, LUO Hai-yang)
- 159 Analysis on the Design Points of Outdoor Municipal Water Supply Pipeline (WANG Xi)
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- **186** Plugging Grouting Technology for Upper Reservoir of Qingyuan Pumped Storage Power Station (DAI Fu)
- **189** Study on Key Technology and Application of Prefabricated Construction of Pier Cap of Viaductin Urban Rail Transit (TIAN Wen-jiang)
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- 229 Construction Technology of Foundation Pit Support in Building Construction Process (ZHANG Song)
- 231 Research on Mechanic Optimization and Construction Technology of Machinery Integrated Construction of Canal Bottom Reconstruction (NIU Shang-feng, ZHENG Gui-liang, ZHANG Zai-Xing)
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