

YASSER HUSSEIN GAD MAHMOUD

Senior Roads / Highways Design Engineer

Cairo, Egypt | Mob: +201005269145, +971501784920 | Email: abougad_111@yahoo.com

Marital Status: Married | Dependents: 4 | Driving License: Egypt & Saudi Arabia | Military Service: Completed

PROFESSIONAL SUMMARY

Highly skilled Senior Roads & Highways Design Engineer with 20+ years of experience in road and infrastructure projects across Saudi Arabia, UAE, Qatar, and Egypt. Proficient in rural/urban roadways geometric design, rough grading, stormwater drainage, and quantity surveying, with a very strong command of Civil 3D, ArcGIS, Infracore, Navisworks, and Recap pro. Adept at managing multi-disciplinary teams and coordinating with urban planners, traffic engineers regarding the "TIS", NOC Engr regarding the "Information/Design NOCs", and government authorities to deliver successful large-scale projects. Experienced in preparing tender drawings, including concept and detailed design, grading plans, contract documents, and design reports. Analyzing the impact of the existing utilities (storm outfalls, sanitary connection, water pipes) on our site layout.

EXPERIENCE

Sr. Roads & Highways Design Engineer

Al Turath Engineering Consultant L.L.C, Dubai, U.A.E (Oct 2024 – Sep 2025)

Client: RTA, DM, & Other Private Clients.

Projects: Urban Residential Roadways, Storm/Sanitary Network, Street Lighting (Nad Alshiba 3 & 4, Madinat Latifh Grading Package, other TIS & Detail design projects).

- Prepared tender drawings including concept/detailed design, grading plans, BOQ, contract documents, and design reports per Dubai Geometric Design Manual standards.
- Developed layout plans, ROW sections, HL/VL alignments, grading plans, and 3D models for roundabouts in line with TIS approvals, Information NOC, and Topographic survey.
- Followed up with NOC Engineer for timely design/information NOC approvals.
- Coordinated with traffic engineers for TIS approvals and other disciplines (storm, hydrology, utilities) to ensure clash-free integration
- Reviewed masterplans and grading elevations against geometric design and plot gate levels.
- Liaised with site supervision teams to address design concerns and RFIs.

Sr. Roads & Highways Design Engineer

Julfar Consultancy, Cairo, Egypt (Nov 2021 – Jul 2023)

Client: Ras Al Khaimah Municipality & Public Service Department (UAE)

Projects: Detailed Designs for Urban Roads Network, Storm drainage Network, and Ponds/Drainage Channels

- Managed the development of tender drawings, covering concept and detailed design packages for (urban roads, ponds grading, and channels/culverts). in compliance with AASHTO & Dubai design standards.
- Led a team of 9 Engr's (road designer, storm, dry/wet' utility, hydrology, and cad drafter), focused on stormwater solutions and hydrology assets regarding the North Rak of "Ras Al Khaimah" flood mitigation strategy.
- Prepared BDR. Conducted 3D modeling of intersections and roundabouts for accurate corridor tie-ins.
- Analyzed the impact of existing utilities (storm discharge. Sanitary connection, water pipes) on our masterplan.
- Coordinated with urban planners about zoning/land use types, infrastructure integration, access & mobility.
- Utilized Navisworks to prevent design conflicts in road-utility integration for design optimization.

Sr. Roads & Highways Design Engineer

Kattan Engineering Consultancy, Riyadh, Saudi Arabia (Oct 2020 - Nov 2021)

Client: Riyadh Municipality & Mecca Municipality

Projects: AL-Esaila "Roads/Drainage" Network in Mecca, AL-Khedr Roads/Drainage in Riyadh & Others

- Developed comprehensive geometric design packages, including general layout, grading plans, alignments, profiles, detailed junctions, ROW typical cross-sections, parking lots, roundabouts, signage and road markings for the assigned urban roads (arterials, collectors, and locals) as per Riyadh/Mecca design criteria standards.
- Collaborated with urban planning team regarding land use types, infrastructure integration, and access/mobility, verified the accuracy of plot/parcel geometry, locations, and levels, and ROW cross-sections.
- Worked with Tender, IFC, Shop drawings, and As-built' Drawings, prepared the detailed BOQ Items.
- Collaborated with hydrology Engr regarding the hydrology study / watershed analysis to confirm the proposed culvert location correctness or proposed channels against our geometric roads design.
- Ensured compliance with MOMRA design standards.

Sr. Roads & Highways Design Engineer

ATKINS, Doha, Qatar (Jan 2016 - Aug 2019)

Client: Public Works Authority (ASHGHAL)

Projects: LRDP (Local Roads & Drainage Program), (C2 Contract), GEC-Doha West, Roads Infrastructures in Al Saliya North of Salwa Road.

- Designed urban roads network (locals, collectors, and arterials) in parallel with (stormwater drainage and (dry/wet) utilities)' design, the scope of work covers (roadways network, storm/sanitary sewer system, micro tunneling, crossing ducts, dry/wet utilities, etc.).
- Developed detailed design packages (HL/VL alignments, grading plans, ROW sections, intersections, Roundabouts, cross-sections) complied with ASHGHAL & QHDM (Qatar Highways Design Manual) standards.
- Verified the accuracy of the parcels geometry, gates (locations/levels), responded to RFIs and design queries.
- Coordinated with drainage and utility teams for seamless project execution, Conducted meetings with owner, PMC & contractor regarding our project progress. Followed up with the site team for any design change.
- Validated BOQs and quantity take-offs to ensure accuracy using the standard measurements methods (CESMM3).

Sr. Roads & Highways Design Engineer

Al-Joab Consulting Engineering, Saudi Arabia, (Egypt's Branch) (Mar 2015 - Dec 2015)

Client: Saudi Royal Commission for Jubail & Yanbu

Projects: King Fahd Industrial Port Infrastructures Project (KFIP) at Jubail Industrial City

- Designed urban road networks (locals, collectors, and arterials) designed for KFIP project, reviewed the masterplan and made sure that infrastructure utilities are well integrated.
- Developed detailed design packages (HL/VL alignments, on street parking bays, ROW sections, intersections, roundabouts) as per Saudi Royal Commission design standards, responded to RFIs and design concerns.
- Coordinated with all other disciplines (Storm, dry/wet utilities, hydrology) to ensure clash-free integration.
- Prepared detailed BOQs and quantity take-offs (QTO), verifying site conditions for cost accuracy.

Sr. Technical Office Engineer (Roads/Infrastructures)

SHIBH Aljazeera Co. (SAJCO), Saudi Arabia, Riyadh (Oct 2012 - Dec 2014)

Client: Riyadh Municipality

Projects: Eastern & Western Riyadh' Urban Roadways Network Projects

- Undertook all design works regarding the assigned urban roadways including (geometric layouts, parking lots, horizontal/vertical alignments, site grading, cross-sections) conforming to Riyadh municipality design criteria standards & having their approvals, worked with IFC, shop drawings, and as-built drawings.
- Prepared and submitted shop drawings for all assigned roads' including (alignments, profiles, and their cross sections using EWXP program) for later approval.
- Closely coordinated with all concerned parties during construction phase to avoid any clash with our design.
- Managed BOQs, QTOs, and contractor invoicing. provided survey crew with the calculation sheets needed.
- Reviewed the final As-built drawings and final quantities, supervised the technical office team to ensure that the daily tasks are within target.

Sr. Technical Office Engineer (Roads/Infrastructures)

ALHARBI Holding Co. Saudi Arabia, Riyadh & Mecca (Jun 2010 - Jul 2012)

Client: Saudi Arabia Ministry of Transport (MOT) & Mecca Municipality.

Projects: Safwa/Rahima highway project, 4th ring road with Jeddah/mecca interchange, Okkaishya cloverleaf

- Prepared/Modified the detailed geometric designs of the assigned roads whether (free highways, interchanges, cloverleaf, mountainous and urban roads) conforming to the Saudi ministry of transport & mecca municipality design standards.
- Reviewed the contract documents, the BOQ items in detail as per the contract drawings/specifications, provided survey crews with the data/calculation sheets needed for their setting out and other tasks.
- Prepared/ verified the monthly payment certificates for both the company & subcontractors, also assessed any claims, Vo's (variation orders) against the project' budget.
- Carried out the handing over phase, prepared/reviewed the final As-built drawings & final reviewed quantities.

Sr. Roads & Highways Design Engineer

E.C.G Engineering Consultants Group S.A, Egypt, Cairo (Oct 2008 - Jun 2010)

Client: Egyptian Ministry of Housing

Projects: Madinaty Project (Mixed-Residential Project)

- Led the preparation of tender drawings, including concept and detailed design, gradings, contract documents, detailed BOQs, and design report, responded to any raised RFIs.
- Developed detailed roads design packages including (alignments, profiles, parking lots, roundabouts, ROW typical cross-section) for all assigned urban roadways (arterials, collectors & locals), conducted 3D modelling for roundabouts & junctions.
- Closely coordinated with drainage and utility teams for seamless project execution & clash-free integration.
- coordinated with urban planning team, confirmed correctness for the parcels/plot geometry, plots' gates (locations & levels), Liaised with client/subcontractor' representatives for project progress.

Technical Office Engineer (Roads/Infrastructures)

Mutlaq Al Ghowari Co, Saudi Arabia, Hail (Jan 2006 - Jul 2008)

Client: Public Works Authority (ASHGHAL)

Projects: (Moqaq/Hafeer) Link 1 "30 Km length, (Hamima/Oqla Bin Gibreen) Link 2 "70 Km length.

- Handled road design (geometric layouts, alignments, profiles, grading, and cross-sections) per MOT standards, generated road cross-sections using (EWXP) program.
- Developed shop drawings and provided essential data to the site team & surveyors.
- Managed BOQs, QTOs, and contractor invoicing.
- prepared/reviewed the final As-built documentation & final reviewed quantities for the handing over phase.

EDUCATION & CERTIFICATIONS

- BEng, Civil Engineering – Faculty of Engineering (Shoubra, Banha University), Egypt (May 2002)
- Certified Cost Professional (CCP) – American University in Cairo (AUC) (GPA: 3.70)
- Project Management Professional (PMP) – MMTI, Doha, Qatar (40 PDUs)
- Advanced American English Course – MODLI, Egypt

TECHNICAL SKILLS

- Design Software:
 - Civil 3D (2010–2025)
 - ArcGIS (Desktop/Pro)
 - Infracore
 - Vehicle Tracking
 - Navisworks Manage (Clash Detection)
 - Autodesk Recap Pro (Lidar/Point Cloud files)
- Project Tools:
 - Autodesk Docs (Cloud Collaboration)
 - Microsoft Office (Excel, Power Query, Pivot Tables, Power BI, Word)
- Traffic Analysis:
 - PTV VISSIM, Synchro

MEMBERSHIPS

- Egyptian Engineers Syndicate
- Saudi Council of Engineers