HAZARD MITIGATION ENGINEERING AND ARCHITECT SPECIALIST

RESOURCE CATEGORY	Mitigation
RESOURCE KIND	Personnel
OVERALL FUNCTION	The Hazard Mitigation (HM) Engineering and Architect Specialist provides a full range of technical services in support of mitigation program activities, including initial project development, building performance, post-disaster damage evaluations, benefit-cost analysis, and programmatic eligibility reviews
COMPOSITION AND ORDERING SPECIFICATIONS	1. This position can be ordered as a single resource 2. Requestor specifies any additional qualifications necessary based on incident complexity and needs 3. Discuss logistics for deploying this position, such as working conditions, length of deployment, security, lodging, transportation, and meals, prior to deployment

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	SINGLE TYPE	NOTES
DESCRIPTION	The HM Engineering and Architect Specialist: 1. Provides technical assistance for mitigation project grant applications, including the HM grant program, Public Assistance (PA), and HM assistance 2. Reviews PA (Stafford Act Section 406), HM grant program (Stafford Act Section 404), and other mitigation project applications 3. Conducts site visits in support of mitigation projects and application development 4. Supports and collaborates with HM staff in identifying, developing, and reviewing mitigation projects for eligibility and technical feasibility 5. Provides design and engineering analyses to help develop mitigation project scopes and cost estimates 6. Develops cost estimates for proposed mitigation projects 7. Reviews architectural designs for the HM grant program to confirm sound mitigation techniques and compliance with policy guidelines 8. Provides technical assistance to local building code, land use, and floodplain management officials 9. Obtains and evaluates technical information from a full range of hazard data from a variety of sources 10. Reviews, evaluates, and coordinates disaster-specific information, including engineering and analyses of disaster-impacted infrastructure 11. Participates in preliminary damage assessments and mitigation assessment teams 12. Conducts benefit-cost analyses of HM proposals, including data collection, development of appropriate methodologies, and interpretation of results 13. Provides expertise on local and national building codes and mitigation project code compliance 14. Writes technical reports presenting hydrologic/hydraulic, engineering, architectural, and hazard/risk study results	Sources of hazard data include: Earthquake hazard maps, Flood Insurance Rate Maps (FIRM), Flood Insurance Studies (FIS), other flood studies, engineering studies, wind speed maps, high-water marks, topographic maps, damage function reports, Burned Area Emergency Response reports, and other relevant technical resources.
EDUCATION	Bachelor's degree in civil engineering, structural engineering, architecture, or related field	Not Specified

COMPONENT	SINGLE TYPE	NOTES
TRAINING	Completion of the following: 1. IS-100: Introduction to the Incident Command System, ICS-100 2. IS-163: Hazard Mitigation Grants in Disaster Operations 3. IS-164: HM Hazards and Performance Analysis (HPA) in Disaster Operations 4. IS-200: Basic Incident Command System for Initial Response, ICS-200 5. IS-276: Benefit-Cost Analysis Fundamentals 6. IS-393: Introduction to Hazard Mitigation 7. IS-634: Introduction to FEMA's Public Assistance Program 8. IS-700: National Incident Management System, An Introduction 9. IS-800: National Response Framework, An Introduction 10. IS-922: Application of GIS for Emergency Management 11. IS-2700: National Mitigation Framework, An Introduction 12. IS-2900: National Disaster Recovery Framework (NDRF) Overview 13. E/L0313: Basic Hazus 14. E/L0871: Maximizing Mitigation: HMGP/PA 406 Hazard Mitigation Integration	Not Specified
EXPERIENCE	Knowledge, Skills, and Abilities: 1. Knowledge of basic floodplain management applications and statistical methodologies 2. Familiarity with development and review of HM project proposals Experience: 1. Successful completion of the National Qualification System (NQS) Position Task Book (PTB) for the National Incident Management System (NIMS) Hazard Mitigation Engineering and Architect Specialist, or equivalent Authority Having Jurisdiction (AHJ) documentation 2. Experience implementing mitigation program elements in a post-disaster environment 3. Experience interpreting and analyzing of National Flood Insurance Program data 4. Experience completing benefit-cost analysis for hazard mitigation proposals 5. Experience participating in community meetings about mitigation programs and their implementation	Not Specified
PHYSICAL / MEDICAL FITNESS	Light	NIMS Guideline for the NQS defines Physical/Medical Fitness levels for NQS positions.
CURRENCY	Functions in this position during an operational incident, planned event, exercise, drill, or simulation at least once every five years	Not Specified

COMPONENT	SINGLE TYPE	NOTES
PROFESSIONAL AND TECHNICAL LICENSES AND CERTIFICATIONS	Not Specified	Not Specified

NOTES

Nationally typed resources represent the minimum criteria for the associated component and capability.

REFERENCES

1. FEMA, National Qualification System (NQS) Position Task Book for Hazard Mitigation Engineering and Architect Specialist, latest edition adopted
2. FEMA, National Incident Management System (NIMS), October 2017
3. FEMA, NIMS Guideline for the NQS, November 2017
4. FEMA, National Disaster Recovery Framework, June 2016
5. FEMA, National Mitigation Framework, June 2016
6. FEMA, National Response Framework, June 2016
7. Robert T. Stafford Disaster Relief and Emergency Assistance Act, Sections 404 and 406, as amended