Attachment 7

Proposition 84
STORM WATER GRANT PROGRAM - SCOPE OF WORK PERFORMANCE MEASURES

Applicant: City of San Marcos **FAAST PIN: 23295**

Project: San Marcos Creek Urban Runoff, Pollutant Abatement, and Stormwater Management Project

Task	Task Description	Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
1	**Direct Project Administration and Management**						
A	Contracting	• Prepare Request for Proposal • Evaluate submittals • Interview/award contract • Contract negotiations • Contract execution	• Bonded, reliable contractors. • Minimize Change Orders. • Maintain schedule and control cost.	Budget aherence, schedule comformance, quality construction.	No project delays, change orders, or overruns.	Time spent; dollars spent.	On time, on budget.
B	Kick off Meeting and routine project status meetings	• Set roles and responsibilities • Regular reporting of progress, correspondence, site visits, coordination with others • Information exchange with the City staff and sub-consultants • Monthly meetings (18 minimum) with weekly teleconferences	Clear communication throughout project construction	Seamless project execution and coordination	Good attendance at meetings, clear agreement on progress and quality, concurrence of responsibilities	Adherence to schedule, budget, and claim of responsibility	Consistent staffing throughout project execution, timely communication, thorough status reporting
C	Active management	• Quality Assurance / Quality Control • Invoice review and payment • Budget management • Contract amendments/change orders	• Quality performance and construction. • Value gained for dollars expended. • Smooth project execution.	Same as Outcomes	Same as Outcomes	Same as Outcomes	Same as Outcomes
2	**Design and Environmental Compliance**						
D	LID BMP Design Plans, Specifications and Estimate	• Plans, specifications, and estimates (PS&E) •100% and Final design of LID Treatment Facilities, Landscape and Planting • Full design of Monitoring Station Access Points • Interpretive signage layouts • Bid documents	• Proper and balance runoff conveyance. • Avoidance of poor-draining soils. • Engineered solutions for environmental improvements. Functional, aesthetic landscape designs that meet water quality treatment goals and create public space amenities.	• Improved hydrology and reduced erosion. • Suitable subsurface percolation and infiltration designs. • Balanced conveyance routing and discharge points. • Established and stable landscape designs that reduce runoff pollutant and improve discharge water quality to San Marcos Creek. Positive public feedback on project layout and amenities.	• Mimic natural hydrology. • Proper siting of subsurface percolation features. • Viable conveyance routing (hydrualic balance). • Pollutant concentration reductions in project runoff. • Public attendance/usage of open spaces.	Calculate/confirm pre-project hydrology is maintained. Low plant mortality rate. Minimial irrigation needs (water meters, well pumping).	• No post-project hydrology increase. • Viable subsurface infiltration designs. • Hydraulically efficeint stormwater conveyance system. • Durable and water efficient planting palatte (good establishment with minimal irrigation maintenance). • Effective pollutant removal by LID IMPs (via monitoring program). • Stable erosion control via mainteance needs.
E	California Environmental Quality Act / NPDES compliance and permitting	• Clean Water Act Section 401 - RWQCB • Clean Water Act Section 402 - JURMP • RWQCB Order 2010-0014-DWQ Storm Water Pollution Prevention Plan (SWPPP) / Erosion Control Plans • California Fish and Game	• Permit compliance • Mitigation satisfaction	• Construction SWPPP compliance • No permit violations • Resource agency satisfaction	• SWRCB SMARTS data uploads • Annual Report analysis • Mitigation and Monitoring success criteria	• SWPPP compliance • SWRCB Annual Report submittals • CDFG Mitigation and Monitoring Reports	100% compliance
F	Quality Assurance Project Plan (QAPP) for water quality monitoring and reporting; Surface Water Ambient Monitoring Program (SWAMP) compliance	Comply with Project 401 Permit Monitoring Requirements	• CWA Section 401 Cert. Compliance • QAPP compliance	• Monitoring and reporting compliance • Laboratory performance	Annual Report analysis	• SWRCB Annual Report submittals • QAPP compliance	100% compliance
G	Resource agency coordination, meetings, permit negotiations	Acquire permits, prepare for construction, track compliance and reporting needs	Negotiate/obtain permits in timely manner	Comprehensive permits, inclusive of mitigation, monitoring, and reporting needs	No project delays due to permit acquisition	No project delays due to permit acquisition	No project delays due to permit acquisition

Proposition 84
STORM WATER GRANT PROGRAM - SCOPE OF WORK PERFORMANCE MEASURES

Applicant: City of San Marcos **FAAST PIN: 23295**

Project: San Marcos Creek Urban Runoff, Pollutant Abatement, and Stormwater Management Project

Task	Task Description	Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
3	**Construction/Implementation**						
A	Construction Administration	• Award contract • Contract negotiations • Contractor management and oversight	• Efficient contractor contracting • Timely and cost-effective construction • Quality construction	Same as Outcomes	Same as Outcomes	Same as Outcomes	Same as Outcomes
B	Grub/clearing, mass grading, detail grading for bioswales and bioretention cells/basins	Site preparation	• Efficient construction • Effective on-site controls • No SWPP violations	Same as Outcomes	Same as Outcomes	Same as Outcomes	Same as Outcomes
C	Construct permeable pathways, cobble/rock hardscape, water quality monitoring access points (flumes), and riprap/velocity-dissipation outfalls	Detailed construction	• Efficient construction • Effective on-site controls • No SWPP violations	Same as Outcomes	Same as Outcomes	Same as Outcomes	Same as Outcomes
D	Install Flow-weighted Composite Monitoring Equipment - Dry Weather (1 station) - Wet Weather (1 station)	Install long-term water quality monitoring equipment for assess permit compliance, measure LID pollutant removal performance, evaluate seasonal pollutant removal efficiencies	Reduction in pollutant loading from existing and ultimate land-use conditions in the project tributary area.	Runoff pollutant loading reductions measured in both concentrations (units/volume) and loading (lbs/time) relative to flow cubic feet per second (cfs).	Improvement of water quality (reduced event mean concentrations and calculated % load) at project discharge points relative to baseline conditions	Grab and flow-weighted composite stormwater runoff samples during dry and wet weather conditions for pollutant concentrations and loading calculations.	Attain effluent concentrations as follows: Fecal Coliform = 522 mpn/100 mL Ammonia = 0.27 mg/L Phosphorus = 0.14 mg/L Nitrogen, Total Kjeldahl = 0.58 mg/L; TSS = 8.95 mg/L; COD = 3.15 mg/L Copper = 1.79 ug/L Zinc = 14.84 ug/L
E	Install Index of Biotic Integrity Monitoring Locations - 3 stations	Record and assess benthic macro-invertebrate (BMI) scores, assess physical habitat	Demonstration in receiving water body under Voluntary TMDL (San Marcos Creek) shows effects of Pollutant Load Reduction from Project flow through planters, porous pavement , bioretention facilities remove pollutant loading from the upstream urban watershed and project as expected	Number of Improving IBI Scores from Baseline IBI score indicating Positive Effect on 303(d) listed water body of pollutant load reduction from adjacent urban watershed	Number of Laboratory Reports showing improving IBI scores Number of reports showing IBI data collection in compliance with SWAMP protocol and project QAPP Methods	Index monitoring results	Increasing IBI score for San Marcos Creek from baseline score of 11
F	Install native drought-tolerant landscaping, ground cover, and post-construction erosion control	Post-construction stabilization, erosion control, sedimentation control, and plant establishment	• Site stabilization • Low maintenance • Low TSS in site runoff	• Acceptable minimum erosion • Acceptable level of maintenance watering • Acceptable TSS concentration in runoff	• Low erosion occurrence • Low irrigation need • TSS concentration <100 mg/L	• Site observations and physical measurement of erosion • Water well meter readings • Discharge sample analysis of TSS	• Rilling erosion, no gully formation, no offsite sediment discharge • Water well usage < 1000 gallons/month • Discharge TSS < 100 mg/L
F	Construction contingencies	Reserve funds for unknowns	No contingency expenditure	Same as Outcomes	Same as Outcomes	Same as Outcomes	Same as Outcomes

Proposition 84
STORM WATER GRANT PROGRAM - SCOPE OF WORK PERFORMANCE MEASURES

Applicant: City of San Marcos **FAAST PIN: 23295**

Project: San Marcos Creek Urban Runoff, Pollutant Abatement, and Stormwater Management Project

Task	Task Description	Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets
4	**Monitoring/Performance**						
A	Conduct dry weather monitoring at bioretention/bioswale facilities	Measure and quantify dry weather flow, determine BMP effectiveness of LID bioretention systems for urban runoff pollutant removal	Demonstration that Project accepts and infiltrates dry weather flow without offsite discharge	No offsite discharge during dry season	No offsite discharge during dry season	No flow measured at effluent monitoring stations; no visible offsite discharge.	No flow measured at effluent monitoring stations; no visible offsite discharge.
B	Conduct IBI monitoring	Document and assess IBI score improvement for watershed and San Marcos Creek	Demonstration in receiving water body under Voluntary TMDL (San Marcos Creek) shows effects of pollutant load reduction from Project flow-through planters, porous pavement, bioretention facilities remove pollutant loading from the upstream urban watershed and project as expected	Number of Improving IBI Scores from Baseline IBI score indicating Positive Effect on 303(d) listed water body of pollutant load reduction from adjacent urtban watershed	Number of Laboratory Reports showing improving IBI scores ; Number of reports showing IBI data collection in compliance with SWAMP protocol and project QAPP Methods	Field data, laboratory analysis, scientifc evaluation of data, compliance assessment and evaluation	Increasing IBI score for San Marcos Creek from baseline score of 11
C	Conduct wet weather monitoring at bioretention/bioswale facilities	Measure and quantify wet weather flow, determine BMP effectiveness of LID bioretention systems for stormwater runoff pollutant removal, assess performance of permeable pavements	Demonstration that Project flow through planters, porous pavement , bioretention facilities remove pollutant loading from the upstream urban watershed and project as expected	• Number of wet weather events showing pollutant concentrations are reduced to the expected effectiveness level of the BMPs • Number of dry weather events showing pollutant concentrations from BMPs meet expected pollutant load removal	• Number of laboratory reports showing pollutant concentrations for dry and wet weather from project water quality LID BMPs meet BMP pollutant load reduction effectiveness for upstream watershed • Number of reports showing compliance with SWAMP protocol andproject QAPP data collection methods	Field instrumentation, laboratory analysis, scientifc evaluation of data, compliance assessment and evaluation	Water Quality at Project outfalls for wet and dry weather indicate water quality BMPs are effecrtively removing pollutant loads from upstream urban watershed at expected pollutant removal rates and concentrations idendtified in bmp.org
D	Annual reporting to San Diego RWQCB	BMP performance assessment, compliance with reporting requirements, short-term and long-term trend analysis, quantification of water quality improvements, documentation of public behavioral changes	Full data sets for each compliance requirement of the Monitoring and Reporting Program	Field data withing acceptable range of compliance	Data is compliant with goals, objectives, and prescribed limits (if applicable)	Field instrumentation, laboratory analysis, scientifc evaluation of data, compliance assessment and evaluation	100% compliance
E	Monitoring Data Integration into SWAMP	Supplement State database on BMP pollutant removal performance	Collection of compatible data for SWAMP database integration	Same as Outcomes	Same as Outcomes	Scientific computations and review of QA/QC data for data acceptance and compatibility	Same as Outcomes
5	**Education/Outreach**						
A	Task Force support and interaction	Continual education and outreach to community planners and activists	Cohesive integration and coordination of project-related issues and education objectives	Same as Outcomes	Increased communitiy awareness	Successful program management being satisfied through interaction with Task Force	Successful program management being satisfied through interaction with Task Force
B	Production of permanent LID interpretive signage, brochures, flyers, various educational products	Communication of function, form, and purpose of water quality treatment/management elements	• Public education and awareness • Public outreach	Positive public behavioral changes relative to pollutant source controls and awareness/contribution to LID pollutant treatment implementation	Positive public behavioral changes relative to pollutant source controls and awareness/contribution to LID pollutant treatment implementation	Positive public behavioral changes relative to pollutant source controls and awareness/contribution to LID pollutant treatment implementation	Positive public behavioral changes relative to pollutant source controls and awareness/contribution to LID pollutant treatment implementation
C	Annual/periodic public presentations and workshops	Outreach and communication of project success, realized water quality improvements, change of public behavior, community acceptance of new amenities	• Public participation • Opportunity for comment, review of draft work products • Public support for improving effectiveness	• Number of stakeholders participating; increase in participation • Input information and total number of comments received • Increased pollution prevention and source control	Report to SDRWQCB through Public Participation Plan process 21 days after quarterly meetings	Public attendance numbers	100% Contact to Stakeholder List In Public Participation Plan
D	Kiosk/booth presence at special events	Outreach to general public, increasing awareness	• Increase awareness • Instill positive behavior and program support	• Increased awareness in the general public • Proactive support in watershed protection	• Increased awareness in the general public • Proactive support in watershed protection	• Increased awareness in the general public • Proactive support in watershed protection	• Increased awareness in the general public • Proactive support in watershed protection
6	**Post-Construction Reporting**						
A	Post-Construction draft and final reports, Summary report.	Summary all project work performed per PAEP.	Report on all data collected, conclusions, benefits realized.	Same as Outcomes	Accepted by Grant Manager	Documents and completes Project	Accepted by Grant Manager