

## **INTRODUCTION AND OBJECTIVES**

In March 2010, Austin City Council approved a new Austin Energy (AE) substation to be located at the edge of the Morris Williams Golf Course along Manor road, ending years of discussion over the location. The substation is required to serve the new Mueller redevelopment and surrounding neighborhoods.

As part of the approval, City Council directed City staff to ensure neighborhood and stakeholder concerns about the substation be taken into consideration as part of the design process. Austin Energy worked with the master developer of Mueller to initiate a community outreach process and to formulate design recommendations. The attached report from these meetings has been generated and adopted by the community, stakeholders, and Council.

The consensus of the community outreach meetings was that the substation include significant landscaping. At each meeting, the groups had to decide the best way to screen and enclose the substation with a budget of \$220,000. The groups were willing to sacrifice somewhat on the enclosure of the substation to install more landscaping. The design concept, as is shown on the front page of the report, provides for a masonry wall of varying height on two sides, chain-link fence on the other two sides facing the golf course, and landscaping along Manor Road and the golf course.

The assumption when the report was adopted was that “at least half of the 210 trees proposed for the project will be procured and delivered to the site at no cost (except installation) through AE’s Heat Island Mitigation Program.” This was the only way to keep the project within budget. Unfortunately, AE was told in February that the funds for the Program were limited and this project would not be funded due to earlier requests.

Fortunately, the landscape design plays well into the Urban Forest Grant Program’s purpose to supplement the number of trees planted and sustained in Austin. The trees will be in an area viewed and enjoyed by an extensive portion of the population, whether traveling Manor Road or hitting the links at Morris Williams Golf Course. Today, the landscaping for this section of the golf course to be developed consists of boulders, two hackberry trees and one mesquite (see photo on Page 17 of the report). The setting is also adjacent to a compact urban development, Mueller, which has been virtually void of trees due to the nature of its previous use as an airport.

Of equal importance is the knowledge that the trees will be maintained by a qualified staff housed at Morris Williams and be planted on land that will remain a City-owned golf course for the foreseeable future. The proposed irrigation system for the trees will connect to the golf course’s existing irrigation system using reclaimed water, which provides nourishment for the landscaping as well as saving precious treated water.

Requested funding from the Urban Forest Grant Program would fall into the category of Tree Planting and Transplanting.

## APPROACH AND METHODS

After attending the community meetings and reading the final report, the landscape architect transformed the desired concept into a buildable design. The architect consulted with staff at Morris Williams Golf Course to assure the new landscaping would not restrict play. Since a Site Development Permit is required for the substation itself, the landscape plan also follows the rules as defined in the City of Austin Land Development Code.

The resulting plan is shown in the attached documentation. The architect focused on specifying trees that were supported by the Heat Island Mitigation Program, which means they are native and drought resistant. These same trees can be found in the eligibility list for the Urban Forest Grant Program.

In adherence to City of Austin Land Development Code, the trees also play a role in drainage to the north of the substation by being part of the vegetative filter strip. This 1.2 acre area will be designated with educational signs and never be developed. If desired, the signage could recognize the Urban Forest Grant Program for its contribution.

A bid package incorporating the landscape design is now being developed using City standard environmental enhancement specifications that reference and conform to the American Standard for Nursery Stock. Prior to bidding, the City Council, surrounding neighborhoods and other stakeholders will be able to view the design and provide comments. Pertinent comments will be incorporated into the bid package.

The bid package is scheduled for first advertisement in **July** using the City's Contract and Land Management Department processes and oversight. Council award should be in **early October**. The responsive, lowest bidder will then begin planting in the fall of 2011, the favorable time of year for tree planting. The contractor will have a one-year warranty period on the installed landscaping and irrigation system with a portion of the award amount held until the contractor satisfactorily reaches the end of the warranty period.

To make sure the trees flourish, an irrigation system designed specifically for the newly planted trees will be part of the bid package. The contractor will be instructed to connect the irrigation system to the extensive network of piping already present at Morris Williams Golf Course. Using the golf course's reclaimed water system provides nutritional benefit for the trees. The watering system and grounds are manned seven days a week, 364 days a year to further ensure the establishment and growth of the trees. Even during drought and water rationing, the golf course can continue to water using the supply of reclaimed water. There is an added benefit for the City as a whole in that treated water can be conserved and put to other uses instead of irrigating this landscaping.

## MILESTONES

Landscape Bid Package Development Concludes  
Bid Opening

July 19, 2011  
August 19, 2011

Council Award	October 6, 2011
Planting Begins	November 1, 2011
Contractor One-Year Warranty Period Begins	December 28, 2011

In completion of this work, the landscaping project will have the following benefits:

- The end product bestows an environmentally-friendly landscape plan using native trees that are drought resistant.
- Trees will be planted on property owned by the City of Austin during the prime planting season.
- The trees will be inspected by the landscape architect prior to planting and the contractor will guarantee the health of the trees for one year.
- Water used for the landscaping comes from reclaimed water instead of utilizing treated City water. The reclaimed water provides more nutritional benefit for the trees and the trees can be watered when typical watering restrictions apply. The irrigation system is specifically designed for layout of the trees.
- Continuous care for the landscaping will be performed by a group that is dedicated to making the entire golf course beautiful for the enjoyment of its players and the community.
- It is possible that this enhancement will bring increased revenue to the golf course.
- An area of Austin that has lacked trees in the past (in the flight path of Robert Mueller Airport) will be repopulated with 167 trees. There are practically no trees or landscaping in the area today.
- The community groups, stakeholders, and Council will see to fruition the results of the input process.
- The golfers and travelers along Manor Road will receive some shielding of the substation infrastructure.
- If desired, the Urban Forest Grant Program will be recognized for the contribution with signage along Manor Road and the golf course.

## BUDGET

The landscape architect has provided the following budget for the proposed design divided into permit-required and enhancement landscaping.

### PERMIT REQUIRED LANDSCAPING

	Unit Price	Unit	Qty	Cost
5" caliper trees	\$1,089.00	EA	5	\$5,445.00
4" caliper trees	\$400.00	EA	13	\$5,200.00
2" caliper trees	\$200.00	EA	39	\$7,800.00
3 gallon shrubs	\$20.00	EA	158	\$3,160.00
Lawn – sod	\$5.00	SY	3,520	\$17,600.00
Turf restoration	\$5,000.00	LS	1	\$5,000.00
Excavation	\$10.00	CY	100	\$1,000.00
Bed soil, no edging, 9"	\$50.00	CY	30	\$1,500.00
Mulch, 3" deep	\$20.00	CY	30	\$ 600.00
Gravel bed, 6" deep	\$30.00	CY	100	\$3,000.00
Soil at sod areas 2"	\$50.00	CY	195	\$9,750.00
Tree staking kits	\$50.00	EA	9	\$ 450.00
Fine grading at berms (rough grading by others)	\$5,000.00	LS	1	\$5,000.00
Recycled poly board 1" x 6" edging & stakes	\$3.00	LF	1,071	\$3,213.00
Irrigation allowance	\$48,000.00	LS	1	\$48,000.00
Root barrier UB 48-2 DeepRoot (2' panels)	\$31.20	EA	250	\$7,800.00
Root barrier trenching labor	\$50.00	LF	500	\$25,000.00
			<b>TOTAL</b>	<b>\$149,518.00</b>

### ENHANCEMENT LANDSCAPING

	Unit Price	Unit	Qty	Cost
4" caliper trees	\$400.00	EA	62	\$24,800.00
15 gallon trees	\$140.00	EA	48	\$6,720.00
Mulch, 3" deep	\$20.00	CY	40	\$ 800.00
Tree staking kits	\$50.00	EA	62	\$3,100.00
Irrigation allowance	\$27,000.00	LS	1	\$27,000.00
			<b>TOTAL</b>	<b>\$62,420.00</b>

In our community outreach meetings, we had determined a budget limit of \$70,000 for landscaping. The above estimate is \$136,758 for landscaping minus irrigation. Again, the \$70,000 budget was derived based on getting half of the trees funded through the Heat Island Mitigation Program.

Austin Energy respectfully requests the Urban Forest Grant Program to grant funding for at least \$35,420, the cost of the Enhanced Landscaping minus the irrigation. If possible, funding is requested for the entire Enhanced Landscaping budget of \$62,420. This is close to the difference between the landscape budget of \$70,000 and the cost of landscaping of \$136,758 (or \$66,758.00). As Primary Contact and Project Manager for the Mueller Substation project, Dorothy Kester is prepared to make a presentation to the Urban Forestry Board since this figure exceeds the project maximum.



## **PERSONNEL QUALIFICATIONS**

Project Manager

Dorothy Kester, PE, PMP

505-7041

Dorothy has been employed by Austin Energy for over 21 years and has successfully managed multiple substation projects. She will develop the bid package and oversee the bidding and installation of the landscaping and irrigation. Dorothy will be spending 50% of her time on this project.

Morris Williams Golf Course Superintendent

Jason Chapman

926-3580

Jason is a member of the Golf Course Superintendent's Association of America and is a Class A member. Jason has contributed to the landscape plan and will personally watch over the planting activities to make sure the plants are properly installed and maintained. Employees of the golf course are a major stakeholder in this project. Jason and his staff are housed at Morris Williams Golf Course and can provide immediate consultation as required.

Landscape Architect

Roberto Garcia, ASLA

892-0353

Roberto has developed landscape plans for three Austin Energy substations, including Mueller Substation. He has also worked on other City projects such as the reclaimed water tower at Mueller for Austin Water Utility and the new Austin Animal Services Center. Roberto also served as chairman of the Forestry Board. As architect of the landscape plan, which is part of the Site Development Permit, Roberto is the responsible party to assure the landscaping is planted as designed. He will spend 5% of his time visiting the site during construction, but is located in Austin to visit more often or answer questions as necessary.

The contractor will be chosen as part of the City's bidding process.

The facilities at Morris Williams Golf Course are ideal for planting an urban forest. The grounds are maintained continually since the playability of the course is important to retain and satisfy customers.



## **PRIMARY CONTACT INFORMATION**

Dorthy Kester will act as the primary contact for this grant application

Office 505-7041

Cell 762-5660

Fax 505-7077

[dorthy.kester@austinenergy.com](mailto:dorthy.kester@austinenergy.com)

Austin Energy

2526 Kramer Lane

Austin, TX 78758