LANDSCAPE CALCULATIONS

STREET YARD

	Required	Provided
Total Site Area	N/A	620,018 sf.
Total Street-yard Area	N/A	34,117 sf
Street-yard Landscape (20%)	10,829 sf.	16,445 sf. (97 %)

	Required	Provided
TREES (street-yard)	14	19 (including existing tree credit)

Existing tree credit

2" dia. to 6" dia.	n/a ea. x 1=	n/a ea.
6" dia. or greater	1 ea. x 2=	2 ea.
Proposed Trees (street yard)	15 ea.	15 ea.

REPLACEMENT TREES

Required caliper inches replaced: 44.75"

Number & size of replacement tree total: reference mitigation table.

ISLAND, MEDIANS, OR PENINSULAS

	Required	Provided
Street-yard area	n/a sf.	n/a sf.
Non street-yard area	1,725 sf.	11,054 sf.

BUFFER POINTS Required 216 Total Provided 216

	SIZE	QUANTITY	PREFERRED	OTHER PROVIDED	
Existing Trees	x	x	x pts.	x pts.	x pts.
Larger Trees	5" cal.	7	4 pts.	x pts. 68	pts.
Small Trees	2" cal.	5	6 pts.	x pts. 30	pts.
Large Shrubs	5 gal	41	3 pts.	x pts. 123	pts.
Medium Shrubs	x	x	x pts.	x pts. x	pts.
Small Shrubs	x	x	x pts.	x pts. x	pts.
Decorative Wall (3' min. height)			x lf x 3		x pts.
Berm (3' min. @ 4:1 max. slope)			x lf x 1		x pts.

LARGE TREES

QUANTITY	SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE & CONDITION
19		Chinquapin Oak	Quercus muhlenbergii	5" caliper, 6' Ht minimum
21		Cedar Elm	Ulmus crassifolia	5" caliper, 6' Ht minimum
15		Bald Cypress	Taxodium distichum	5" caliper, 6' Ht minimum
21		Monterey Oak	Quercus polymorpha	5" caliper, 6' Ht minimum
4		Live Oak	Quercus virginiana	5" caliper, 6' Ht minimum

SHRUBS

QUANTITY	SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE AND CONDITION
11	(ds)	Sage, Mex. Bush	Salvia leucantha	5 gallon, 24" O.C.
40	(kr)	Rose, Red Knockout	Rosa spp. 'Radrazz'	5 gallon, 20" Ht./20" spread

ORNAMENTAL TREES

QUANTITY	SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE & CONDITION
11		Mountain Laurel, Texas	Sophora secundiflora	6' Ht./4' spread, B&B, cured 2" caliper
15		Possumhaw	Ilex decidua	5' Ht./3' spread, 2" caliper

TREE REPLACEMENT CALCULATIONS

290	8	4								Cedar
291	8	4								Cedar
298	10	5								Cedar
299	12	6								Cedar
300			19	4.75						Cedar
302	9	4.5								Cedar
303	9	4.5								Cedar
304	9	4.5								Cedar
321	8	4								Cedar
322	8	4								Cedar
323	9	4.5								Cedar
Totals	90		19							
Mitigation Inches		45		4.75						49.75

URBAN FORESTRY SUMMARY

TOTAL TREE INCHES SURVEYED	276.5
TOTAL TREE INCHES REMOVED, 8"-18" ON APPENDIX F	47
TOTAL TREE INCHES REMOVED, 8"-18" NOT ON APPENDIX F	14
TOTAL TREE INCHES REMOVED, 19"+ ON APPENDIX F	0
TOTAL TREE INCHES REMOVED, 19"+ NOT ON APPENDIX F	0
TOTAL TREE INCHES PLANTED ON SITE	280"

GENERAL IRRIGATION NOTES:

1. Adjustable flow controls shall be required on circuit remote control valves. Pressure regulation components shall be required where static pressure exceeds manufacturers recommended operating range.
2. Valves and circuits shall be separated based on water use so that turf areas are watered separately from shrub and groundcover areas. Irrigation heads in the turf areas will be valved separately from shrub and/or ground cover areas. It is recommended that seasonal color areas be watered separately from turf areas.
3. Sprinkler heads shall have matched precipitation rates within each control valve circuit.
4. Serviceable check valves shall be required adjacent to paved areas where elevation differences may cause low head drainage.
5. Sprinkler head spacing shall be designed for head-to-head coverage or heads shall be spaced per manufacturers recommendations and adjusted for prevailing winds. The system shall be designed so that irrigation is not applied to vehicular traffic lanes, other pavement or structures.
6. All automatic irrigation systems shall be equipped with a controller capable of dual or multiple programming. Controllers shall have multiple cycle start capacity and a flexible calendar program, including the capacity of being set to water every five days. All automatic irrigation systems shall be equipped with a rain sensor shut-off device.
7. Irrigation construction plans shall include a water budget. A laminated copy of the water budget shall be permanently installed inside the controller door. Water budget shall include:
   A. Chart containing zone number, precipitation rate and gpm.
   B. Location of emergency irrigation system shut-off valve.
   C. To schedule a free City of Austin irrigation audit call (512) 974-0542.
8. Contractor to submit detailed shop drawings that identify schematic location of all piping, heads, valves, etc. The design of the system shall meet all water conservation irrigation system requirements as per the Environmental Criteria Manual.
9. All mainline piping shall be buried to have a minimum cover of 18". All lateral piping downstream of the main line shall be buried to have a minimum cover of 12".
10. All mains are to drain to low points at a minimum of one half (1/2%) percent slope. At low points, install gate valve to facilitate drainage of system during freezing temperature.
11. Contractor shall install automatic drain valves at low points in the irrigation lines as required to prevent freeze damage.
12. All valve boxes shall be black in color (body and lid). Sizes shall be ten (10") inches by fourteen (14") inches (rectangular) for remote control valves and nine (9") inches (round) for gate and quick coupler valves.
13. Contractor shall insure positive drainage of lateral lines and main lines.
14. All wiring from the irrigation controller to the remote control valves shall be UF-14/1 direct burial cable. All wire splices shall be made in valve boxes only using Rainbird snap-site connectors and sealant. Provide sleeves for wire under paved areas as required.
15. All irrigation installation shall conform to the local codes and regulations.
16. Irrigation system shall be installed and fully operational before landscaping installation
17. Irrigation heads shall be placed and adjusted so as not to spray on the building.
18. Irrigation heads shall be placed and sized so as not to be susceptible to damage by automobile overhangs.

Appendix O: Landscape/Irrigation Notes

SITE DEVELOPMENT PERMIT - IRRIGATION NOTES

Automatic irrigation systems shall comply with the following requirements. These requirements shall be noted on the Site Development Permit and shall be implemented as part of the landscape inspection:

1. A new commercial and multi-family irrigation system must be designed and installed so that:
   (a) there is not direct overspray onto non-irrigated areas;
   (b) the system does not include spray irrigation on areas less than six (6) feet wide (such as medians, buffer strips, and parking lot islands)
   (c) above-ground irrigation emission devices are set back at least six (6) inches from impervious surfaces;
   (d) the irrigation system has a master valve;
   (e) circuit remote control valves have adjustable flow controls;
   (f) serviceable in-head check valves are adjacent to paved areas where elevation differences may cause low head drainage;
   (g) the irrigation system has a City-approved weather based controller;
   (h) an automatic rain shut-off device shuts off the irrigation system automatically after not more than a one-half inch (1/2") rainfall;
   (i) zone valves and circuits are separated based on plant water requirements;
   (j) an irrigation emission device (such as spray, rotor, or drip emitter) does not exceed the manufacturer's recommended operating pressure; and
   (k) no component of the irrigation system deviates from the manufacturer's recommended use of the project.
2. The maximum spacing between spray or rotary sprinkler heads must not exceed the radius of throw of the head unless manufacturer of the sprinkler head specifically recommends a greater spacing. The radius throw is determined by reference to the manufacturer's specifications for a specific nozzle at a specific operating pressure.
3. The irrigation installer shall develop and provide an as-built design plan and water budget to the City at the time the final plumbing inspection is performed. The water budget shall include:
   (a) a chart containing zone numbers, precipitation rate, and gallons per minute, and
   (b) the location of the emergency irrigation system shut-off valve. A laminated copy of the water budget shall be permanently installed inside the irrigation controller door.
4. The irrigation installer shall provide a report to the City on a form provided by the Austin Water Utility Department certifying compliance with Subsection 1 when the final plumbing inspection is performed by the City.

INNOVATIVE WATER MANAGEMENT

REQUIRED LANDSCAPED AREA 10,829 SF + 1,725 SF =	12,548 SF	
50 PERCENT OF REQUIRED LANDSCAPED AREA	6,274 SF	
	REQUIRED	PROVIDED
LANDSCAPING RECEIVING STORM WATER RUNOFF	0	0
UNDISTURBED NATURAL AREAS	6,274 SF	6,274 SF
UNDISTURBED EXISTING TREES	0	0
TOTAL	6,274 SF	6,274 SF

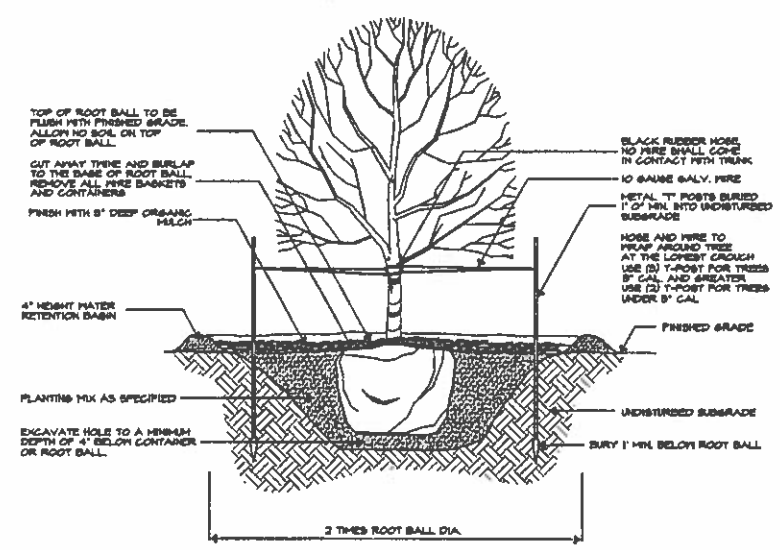
MITIGATION PERCENTAGE TABLE

	ON APP. F 8"-18"	NOT ON APP. F 8"-18"	ON APP. F 19"+	NOT ON APP. F 19"+
Totals	40	14	0	0
INCHES TO BE REPLACED	50%	25%	100%	50%
	45	4.75	0	0

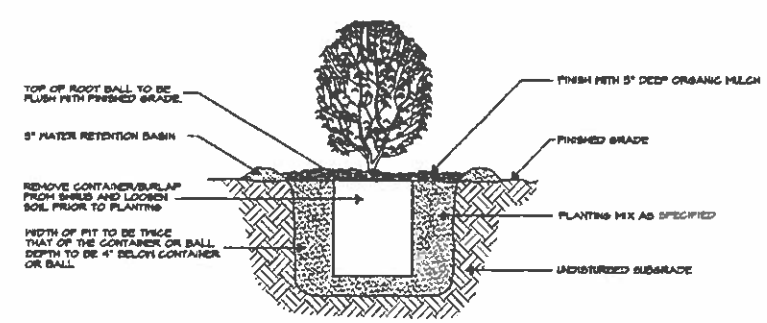
TOTAL CALIPER INCHES REMOVED	104
TOTAL CALIPER INCHES TO BE REPLACED	44.75
TOTAL CALIPER INCHES REPLACED (55 @ 5" CAL. = 244") (26 @ 2" CAL. = 52") (14 STREET YARDS @ 3" - 1.5" = - 21")	280"
	280"
% OF REPLACEMENT INCHES PROVIDED	362%

GENERAL LANDSCAPE NOTES:

1. All proposed landscaping is to be installed as per local city ordinances and codes.
2. Existing trees to be saved shall be protected by tree protective fencing before construction begins. (REFER TO CIVIL PLANS FOR DETAILS). No equipment or materials shall be stored, operated or maintained within the fenced area. Fences shall be at the dripline and completely surround the tree or clusters of trees. No fires or cleaning of equipment trucks will be allowed in these areas.
3. Irrigation shall be by automated underground system to be installed prior to planting. Large open spaces will have spray or rotary nozzles. Piping that extends into the critical root zone of existing trees shall be hand dug.
4. All landscaping, replacement, screening, buffering, street yard, and all other revegetated areas shall have adequate irrigation provided to sustain growth.
5. Landscaping to be maintained and replaced as required to meet ordinance requirements.
6. Owner may make reasonable substitutions of equivalent trees for those species shown on the landscape plan tree legend. Additionally, the owner may elect to provide plant material above and beyond the materials shown on the plan.
7. All areas of native vegetation beyond the limits of construction shall be left undisturbed.
8. All proposed trees shown on this plan are for landscape requirements and replacement trees. Replacement trees shall be designated on plan by an (R) placed next to the trunk, canopy, or plant label. All replacement trees shall be irrigated by an automated underground system to be installed prior to planting.
9. Landscaping shall be protected by concrete curbing, curb stops or equivalent barriers in vehicular use areas.
10. All required landscape planting areas shall be a minimum of 8 feet in width (feet area). Large parking lots shall have medians with a 10 foot minimum (soil area).
11. All plant materials and irrigation shall be in place and operational at the time of landscape inspection for Certificate of Occupancy. Placed posting shall be made in lieu of a completed landscape installation.
12. No more than 30% of the proposed plant material shall be from the same genus or species.
13. The OWNER will continuously maintain the required landscaping in accordance with the Land Development Code Section 25-8 in effect at the time of this plan approval.



TREE STAKING DETAIL
N.T.S.



SHRUB PIT PLANTING DETAIL
N.T.S.

LANDSCAPE CERTIFICATION BLOCK
PROVIDE SEAL AND CERTIFICATION THAT THE PLAN MEETS THE REQUIREMENTS OF CHAPTER 25-2, ARTICLE 9 OF THE LAND DEVELOPMENT CODE. 25-2-983(A), ECM 2.4.8

ZACH HUNTER DATE

FOR CITY USE ONLY:

SITE PLAN APPROVAL Sheet ___ of ___
FILE NUMBER: _____ APPLICATION DATE: _____
APPROVED BY COMMISSION ON: _____, UNDER SECTION _____ OF CHAPTER _____ OF THE CITY OF AUSTIN CODE.
EXPIRATION DATE (25-5-81,LDC)_____ CASE MANAGER _____
PROJECT EXPIRATION DATE (ORD.#970905-A)_____ EXT'S ___ DES ___

Director, Planning and Development Review Department
RELEASED FOR GENERAL COMPLIANCE: _____ BONDING: _____
Rev. 1 _____ Correction 1 _____
Rev. 2 _____ Correction 2 _____
Rev. 3 _____ Correction 3 _____
FINAL PLAT MUST BE RECORDED BY THE PROJECT EXPIRATION DATE, IF APPLICABLE. SUBSEQUENT SITE PLANS WHICH DO NOT COMPLY WITH THE CODE CURRENT AT THE TIME OF FILING, AND ALL REQUIRED BUILDING PERMITS AND/OR A NOTICE OF CONSTRUCTION (IF A BUILDING PERMIT IS NOT REQUIRED), MUST ALSO BE APPROVED PRIOR TO THE PROJECT EXPIRATION DATE.

DATE	NO.	REVISION	APPROVAL

Burry+Partners
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Austin, Texas 78701
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TBPE Registration Number F-1093
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LANDSCAPE CITY SUBMITTAL NOTES AND DETAILS

TOP GOLF

AUSTIN, TEXAS

DRAWN BY: dc
DESIGNED BY: rc
REVIEWED BY: rc
PROJECT NO.: 0109777-10001

SHEET 23 OF 26

SP-2011-0216C

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