ATTACHMENT 5

Tree Commission Comparison Chart for DiSC 2022

Tree Commission Comments	Project Proposal Response	DiSC 2022 Response
TC1 Tree Quantity - The Davis Innovation and Sustainability Campus development will have a minimum of 4,000 trees, as defined in the City of Davis Tree Ordinance, provided by the developer with the following goals.	<u>Included in the Baseline Project Features:</u> The site shall accommodate a minimum of 1,000 trees for shading and carbon benefits. The maintenance and growth of all onsite trees will be monitored by a third-party arborist and failure to meet tree obligations (i.e. number and shading requirements) will be subject to penalty.	Developer, in consultation with the landscape architect, has determined that the site will likely accommodate 600-1,200 trees. However, after consulting with Tree Davis, rather than committing to a specific and arbitrary number, DiSC 2022 will instead focus on planting the right trees in the correct conditions to achieve the desired shade coverage and canopy performance. Developer remains committed to monitoring by a third-party arborist.
TC2 Bike paths: 80% canopy coverage after 15 years.	Development Agreement Ex. G: Landscaping shall provide 80% shading of pedestrian walkways and off-street Class I bike paths. 50% of parking lot shading shall be achieved through either shade trees or photovoltaic arrays. These requirements shall be demonstrated at building permit for PV or shall be achieved within 15 years of planting for areas shaded by trees. Failure to meet shading requirements shall be considered a code violation and subject to penalty until remedied.	Landscaping shall provide 80% shading of pedestrian walkways and off-street Class I bike paths that are not otherwise shaded by photovoltaics or other renewable energy generation.

TC3 Parking lots: 50% canopy coverage after 15 years or solar arrays at the time of lot construction.	<u>See above.</u>	50% of parking lot shading shall be achieved through either shade trees or photovoltaic arrays. These requirements shall be demonstrated at building permit for PV or shall be achieved within 15 years of planting for areas shaded by trees. Failure to meet shading requirements shall be considered a code violation and subject to penalty until remedied.
TC4 Manufacturing area: 15% minimum canopy coverage after 15 years.	<u>Project does not identify shade canopy</u> <u>based upon use type. Project shall comply</u> <u>with City standards for shading unless</u> <u>otherwise specified.</u>	Same response as previously identified; Project will comply with City standards.
TC5 Housing, mixed-use, office R&D and commercial areas, including hotels: 30% canopy coverage after 15 years.	<u>See above.</u>	See above.
TC6 Parks: 30% minimum canopy coverage after 15 years.	<u>See above.</u>	See above.
TC7 Bike paths to the west of the project, if built as part of DISC proposal, will have 80% canopy coverage after 15 years and will be in addition to the 4,000 tree requirement for the development.	The City has design standards for bike paths that will dictate shading requirements offsite.	Same response as previously identified; Project will comply with City standards for bike paths.
TC8 The project will have a Tree Management Plan. The Tree Management Plan will allow for each tree to have an assigned number to	<u>Included in the Baseline Project Features:</u> The site shall accommodate a minimum of 1,000 trees for shading and carbon benefits. The maintenance and growth of all onsite	The maintenance and growth of all onsite trees will be monitored by a third-party arborist, in the manner determined appropriate by that certified professional.

easily locate and identify specified	trees will be monitored by a third-party	Failure to meet tree obligations will be
trees.	arborist and failure to meet tree obligations	subject to penalty.
	(i.e. number and shading requirements) will	
	be subject to penalty.	
TC9 There shall be habitat and species diversity in the AG buffer. Species should be a mix of valley oak woodland, grassland/burrowing owl habitat, and seasonal wetlands swales.	Included in the Baseline Project Features A diversity of native habitats shall be disbursed and managed throughout the site, primarily within the agricultural buffer and along the channel, including but not limited to riparian and California oak savanna. The agricultural buffer shall include areas densely vegetated and sparsely vegetated to accommodate nesting and foraging opportunities for a variety of species. Install artificial burrowing owl dens in the	The Project remains committed to the previously identified response.
	agricultural buffer in consultation with a qualified biologist.	
TC10 Tree plantings must include drought tolerant and climate-ready trees. There will be a minimum of 200 locally native <i>Quercus sp.,</i> Oak trees.	<u>Included in the Baseline Project Features:</u> Native and drought tolerant plants shall predominate the plant palette. Valley Oaks or other local native oak species will be significantly incorporated into the agricultural buffer area.	The Project remains committed to the previously identified response. While native is important, there will also be an emphasis on climate-ready landscapes, in anticipation that climate change may impact the continued viability of historically native species.
TC11 In the open space area along the east/west ditch, through the middle of the proposed project shall include at	<u>Included in the Baseline Project Features:</u> Restore and enhance the portion of the Mace Drainage Channel onsite utilizing native	Given the updated DiSC 2022 project, the Mace Drainage Channel is no longer in the middle of the proposed project but is along the northern boundary. However, the

minimum 50% California central valley native riparian tree species.	riparian vegetation while maintaining its drainage conveyance function.	Developer remains committed to restoring and enhancing the Mace Drainage channel by utilizing native riparian vegetation while maintaining its drainage conveyance function.
TC12 There will be hedgerows plantedwith native species includingHeteromeles arbutifolia, Toyon,Ceanothus sp., Ceanothus,DISCtostaphylos sp., Manzanita,Fremontodendron, californicum,Fremontondendron, Cercis sp., Redbud,and Rhamnus californica, Coffeeberry,especially on the edge of the 50-footportion of the AG buffer.	The planting of hedgerows is identified within the agricultural buffer. The landscape plans will be a part of Final Planned Development and subject to City review at that time.	The Project remains committed to the previously identified response.
TC13 A preference for permeable paving throughout the project.	<u>Development Agreement Ex. G</u> : All streets and surface-level parking shall utilize low- impact development (LID) features, such as bioswales, to capture and filter runoff and to maximize groundwater recharge. Piping of runoff will be discouraged and only utilized when necessary.	The Project remains committed to the previously identified response.
TC14 Tree Planting Specifications and Irrigation Structural soil and/or suspended substrate pavement shall be used in parking lots.	<u>Included in the Baseline Project Features:</u> Trees planted in parking areas or street- adjacent shall use structured soil or suspended substrate to allow successful tree root development. Developer shall size pavement treatment areas to accommodate	Developer will utilize best practices for tree planting and root establishment. Specifically, Developer commits to the use of structured soils or suspended substrate to allow successful tree root development, to the satisfaction of the City's Urban Forest Manager.

A preference for permeable paving is	the anticipated size(s) of the various tree	
highly recommended around trees.	varietals.	When planting in parking areas or along
When planting in parking areas or		paved walkways, Developer will size
along paved walkways, developer will		pavement treatment area to adequately
size pavement treatment area to		accommodate the tree varietal's intended
adequately accommodate the tree		size.
varietal's intended size.		
		Planting practice and ongoing tree health
All tree plantings must comply with		shall be subject to third-party verification
ANSI A300 Standards and be inspected		by the City's Urban Forest Manager or a
before backfilling.		mutually agreed upon certified arborist.
Irrigation is required and must be		
indicated on the landscape plans.		
TC15 Phasing of Tree Planting	Included in the Baseline Project Features	The agricultural buffer and associated
		peripheral bicycle and pedestrian trail shall
Inner 50 feet of Ag buffer (public	The agricultural buffer and associated	be constructed in segments concurrent with
access and bike path area) to have all	peripheral bicycle and pedestrian trail shall	adjacent development. The peripheral trail
tree planting in early part of Phase 1,	be constructed in segments concurrent with	and bike path will be completed in Phase 2.
including those trees that will provide	adjacent development. The peripheral trail	
80% shade for bike path.	and bike path will be completed in Phase 3.	Improvements to the Mace Drainage
Riparian area on drainage channel to		Channel, the accompanying east/west class
be completed in Phase 1.	Improvements to the Mace Drainage	<i>1 bike trail and the parks south of the</i>
	Channel, the accompanying east/west class	channel will be commenced in Phase 1A.
Trees for the large park on central west	1 bike trail and the parks south of the	The control north which is no longer on
side of development to be in Phase 1	channel will be commenced in Phase 2.	<i>The central park, which is no longer on</i> <i>Mace Boulevard will commence</i>
with park completion	The central park located on Mace Boulevard	construction prior to the 231 st residential
	and the off-grade crossing of Mace	unit, which would have been Phase 1 in the
Outer 100 feet of ag buffer to be	Boulevard shall be constructed in Phase 2.	prior version of this Project.
planted in Phase 2.		

		Developer will establish a Master Owners Association which reports to the City biennially and is responsible for
TC16 Follow-up Tree Care Guarantees for Success		measurement, verification and assuring compliance with Project baseline features, sustainability obligations and mitigation
Developer or successor to pay the City for arborist services to annually	Included in the Baseline Project Features	measures.
monitor all trees in the project. (indefinitely) Financial penalties to be specified in development agreement	Developer will establish a Master Owners Association which reports to the City biennially and is responsible for	The maintenance and growth of all onsite trees will be biennially monitored by a third-party arborist who will provide
and determined at the start of each phase.	measurement, verification and assuring compliance with Project baseline features, sustainability obligations and mitigation	recommendations to improve tree health such as pruning, mulch, and irrigation practices. Inspection, maintenance and
The tree maintenance in the Ag buffer shall be funded by a special assessment	measures.	replacement costs shall be borne by the Developer services district. Compliance
 district as is described under 40A.01.050e "The city reserves its right to form a special benefit assessment district, or other applicable district as is permitted under state law, and to maintain the agricultural buffer and transition area once the land is improved, dedicated, and annexed." The district will include the entirety of the DISC business park. 	The site shall accommodate a minimum of 1,000 trees for shading and carbon benefits. The maintenance and growth of all onsite trees will be monitored by a third- part arborist and failure to meet tree obligations (i.e. number and shading requirements) will be subject to penalty.	Developer services district. Compliance with arborist recommendations is mandatory and failure to comply shall be considered a violation of project entitlements and subject to penalty. If, five years from the original date of planting, a tree is not growing at its anticipated rate or is otherwise showing signs of failure, that tree will be identified by the Urban Forest Manager or certified arborist who, at his or her discretion, may require tree replacement
		at Developer's expense. Attainment of shading requirements shall be demonstrated within 15 years of planting. Failure to meet

		shading requirements shall be considered a code violation and subject to penalty.
TC17 Inspection Protocol Robust annual inspection and documentation protocol to ensure the City of Davis Tree Ordinance is followed. This inspection includes tree canopy, irrigation needs, and any need to adjust, fix, prune, and/or replant any trees. Every stage of the development will be reviewed by the Tree Commission.	Included in the Development Agreement Planting practice and <i>ongoing</i> tree health shall be subject to 3rd party verification by the City's Urban Forest Manager <i>or a</i> <i>mutually agreed upon arborist</i> . <i>The maintenance</i> <i>and growth of all onsite trees will be biennially</i> <i>monitored by a third-party arborist who will</i> <i>provide recommendations to improve tree health</i> <i>such as pruning, mulch and irrigation practices</i> . <i>Inspection, maintenance and replacement costs</i> <i>shall be borne by the Developer or services</i> <i>district</i> . <i>Compliance with arborist</i> <i>recommendations is mandatory and failure to</i> <i>comply shall be considered a violation of project</i> <i>entitlements and subject to penalty</i> . If, five years from the original date of planting, a tree is not growing at its anticipated rate or is otherwise showing signs of failure, that tree will be identified by the Urban Forest Manager <i>or arborist</i> who, at his or her discretion, may require tree replacement.	See above.
TC18 Immediate financial consequences, shall be determined if the trees are not planted or trees are not being maintained per the tree management plan for the property.	<u>See above.</u>	See above.

Consequences should incentivize initial compliance.		
TC19 Reimbursement Protocol to City from Developer		
Developer will reimburse the city for the full cost of both initial plantings and the annual follow-up care. City shall inspect the plantings prior to		
 accepting the project. The Full Cost of Care includes the City Arborist's time to undertake the review of the trees and/or the cost to supervise an outside Arborist hired by the City (possibly subcontracted by Tree Davis) to undertake the review of the trees. Cost of any new trees and their proper follow up for the payt phase of tree 	<u>See above.</u>	See above.
follow-up for the next phase of tree life.		
TC20 Extra Costs - Incurred when the Developer/Contractor/Etc. allow for improper plantings that have not been signed-off as having any of the following:	<u>See above.</u>	Planting practice and ongoing tree health shall be subject to 3 rd party verification by the City's Urban Forest Manager or a mutually agreed upon certified arborist.
5. The proper tree planted		

 6. The proper sod and groundcover installed 7. The proper standards for width and depth of dirt hole size for specified tree 8. The proper follow-up tags assigned for next Phase of Tree Life 		
 TC21 Phase of Tree Life 3. Each tree is assigned a unique identifier number that provides the following tree information: 8. Name 9. Unique specifications determined by planting-to-spec details (Parking lot vs. suspended pavement vs. structural soil) 10.Location within the development 11.Phases 12.Progression 13.Replacement, if needed 14.Photo documentation 	This type of programmatic detail is not typically included in a land use based application.	This type of programmatic detail is not typically included in a land use based application. How best to identify and track the trees onsite falls within the purview, and will be the responsibility of, a certified arborist.

 4. Allowed under approval by City Arborist and/or City hired Arborist Photos must include: 8. Tree Unique Identifier Number -shown large enough to read. 9. Hole depth and width shown along with a measuring stick - from 		
two angles with root ball in place but not covered showing proper hole width and depth		
10. Root ball Cleared - shown from different angles that circling roots are cleared		
11. Root crown showing after dirt is filled in hole12. New Stakes13. Root ball right depth		
14. Nursery stakes removed 15. Tree Canopy		
TC22 Burrowing Owls Statement - The City of Davis Tree Commission is sympathetic to burrowing owls but find it to be the Open Space and Habitat Commission and Natural Resource Commission purview to oversee burrowing owl protection and	<u>Included in the Baseline Project Features:</u> Install artificial burrowing owl dens in the agricultural buffer in consultation with a qualified biologist	The Developer has committed to installing an artificial burrowing owl den in the agricultural buffer in consultation with a qualified biologist. This continues to be the recommendation of OSHC.

our tree recommendations and	
requirements should be understood	
and implemented to fit with those	
other commission recommendations	
for burrowing owl protections.	