CONCEPTUAL MITIGATION PLAN
HOLDSWORTH CENTER
Case No. C814-2017-0024
September 4, 2017

The Holdsworth Center site on Lake Austin contains a wetland CEF along the shoreline of Lake Austin consisting largely of a line of cypress trees with other mixed vegetation. Proposed plans for the development of the Holdsworth Center site indicates three dock structures and a hiking trail along the lake front. These proposed features will have minimal effects on the wetland CEF, but constitute regulated development within the required CEF buffer. To minimize and avoid impacts to the CEF buffer and to mitigate the minimal effects, the project proponent provides the following conceptual mitigation plan.

CONCEPTUAL MITIGATION PLAN

1. There will be a 100 ft buffer setback (generally equal to the CWQZ) from the wetland fringe CEF along the lake front.
2. Within 50 ft of the wetland fringe CEF, there will be no construction activities with the exception of vegetation management (defined below), allowed boat docks or piers, and pedestrian path development on the existing levee (limited to mulch trail surfacing). Within the next 50 ft landward, development would be limited to vegetation management, riparian enhancement, wetland development, and connecting pedestrian paths of the same design.
3. Vegetation management within the wetland CEF and CEF setback would include removal of non-native, invasive species by cutting and/or selective herbicide application to trunks and/or stumps of woody species and targeted spray application to foliage of herbaceous species, minor limb trimming along trails and for view shed, thinning of grape vines in cypress trees, and addition of native grasses, shrubs, and trees in areas where invasives are removed. Native vegetation replacement would generally follow the City of Austin's 609S specification.
4. Riparian enhancement along the lake front would include the vegetation management above and creation of wetland areas landward of the existing levee by excavation to take advantage of shallow ground water. The benefits of the riparian enhancements would be assessed and documented on an area basis (square feet or acres) of treatments rather than by the Zone 4 Lake Shore functional assessment procedure. Existing conditions would be documented

REC'D 9-28-2017

based on tree surveys and quantitative assessment of invasive species by stem counts or canopy cover. Predicted future condition would be based on assumptions of similar metrics for the proposed enhancements. (i.e., stem counts, species diversity, habitat structure and diversity, etc). Invasive or non-native species include, but are not limited to, Chinese tallow, privet, nandina, red-tip photenia, chinaberry, sweet autumn clematis, bermudagrass, johnsongrass, and others to be determined by a biological survey.

The area landward of the existing levee within the CEF buffer currently is completely dominated by Chinese tallow. This area is proposed for wetland and riparian enhancement. The general plan will include the removal of all Chinese tallow by bulldozer in preparation for excavation to create wetland habitat. Portions of the area comprising at least 60 percent will be excavated 1 to 3 feet to encounter groundwater or moist soil conditions related to shallow groundwater. The created wetland areas and other non-excavated areas within the CEF buffer will then be planted with desirable wetland and riparian trees, shrubs, and herbaceous plants, including, but not limited to bald cypress, green ash, sycamore, pecan, buttonbush, deciduous holly, and various species of *Eleocharis, Juncus, Pontederia*, *Schoenoplectus, Carex, and Persicaria.* Following planting, invasive species control measures will be implemented for two years to reduce the re-infestation by Chinese tallow and other non-native or noxious plants.