# 16. LANDSCAPING

Landscape elements should enhance the comfort and attractiveness of the transit route. While maintaining the safety and accessibility of riders to the transit system and other adjacent users, trees, shrubs, groundcovers and vines should provide visual interest and unity as well as provide protection from the hot inland sun. Landscape elements should also create visual connections along the route as well as to adjacent streets and neighborhoods to the transit corridor.

## 16.1 Code and Standards

Unless otherwise stated, landscaping for new facilities or as part of changes to existing facilities should be designed in conformance with local landscape ordinances or published standards. Where the requirements stipulated in this document or any referenced source conflict, the more restrictive requirements shall apply.

## 16.2 Basic Goals

Landscape design should meet the following conditions:

- Recognized by the community as an example of design innovation and excellence;
- Ensures the comfort and safety of the Omnitrans system users, as well as those of adjacent pedestrians, or other adjacent modes of transit;
- Provides a uniform urban design along the entire length of the route, while also achieving a "fit" into the existing neighborhood(s) and physical context of the sites;
- Complements station architecture, art, signage, graphics and lighting designs;
- Uses elements compatible with local climate conditions, is sustainable and conserves water resources where feasible;
- Requires reasonable initial costs and maintenance costs;
- Should mitigate the effects of street widening for exclusive lanes; and
- Uses plant materials selected and located appropriately to avoid conflicts with utilities.

## 16.3 Plant Selection

Selection of plant materials should consider:

- Initial and maintenance costs;
- Local availability;
- Attractiveness;
- Compatibility with urban context and station architecture;
- Growth rate;
- Tolerance to drought, wind, pollutants, vandalism, and abuse;
- Hardiness;
- Compatibility with soil and drainage conditions;
- Sun/shade exposure preferences;
- Maintenance characteristics including leaf, flower, and limb litter; and
- Potential damage to adjacent paved areas by roots and attraction of rodents or insects.

Figure 16-1 shows plant palette used for the sbX Green Line consistent with local plant character


*Figure 16-1: Plant palette used for the sbX Green Line*

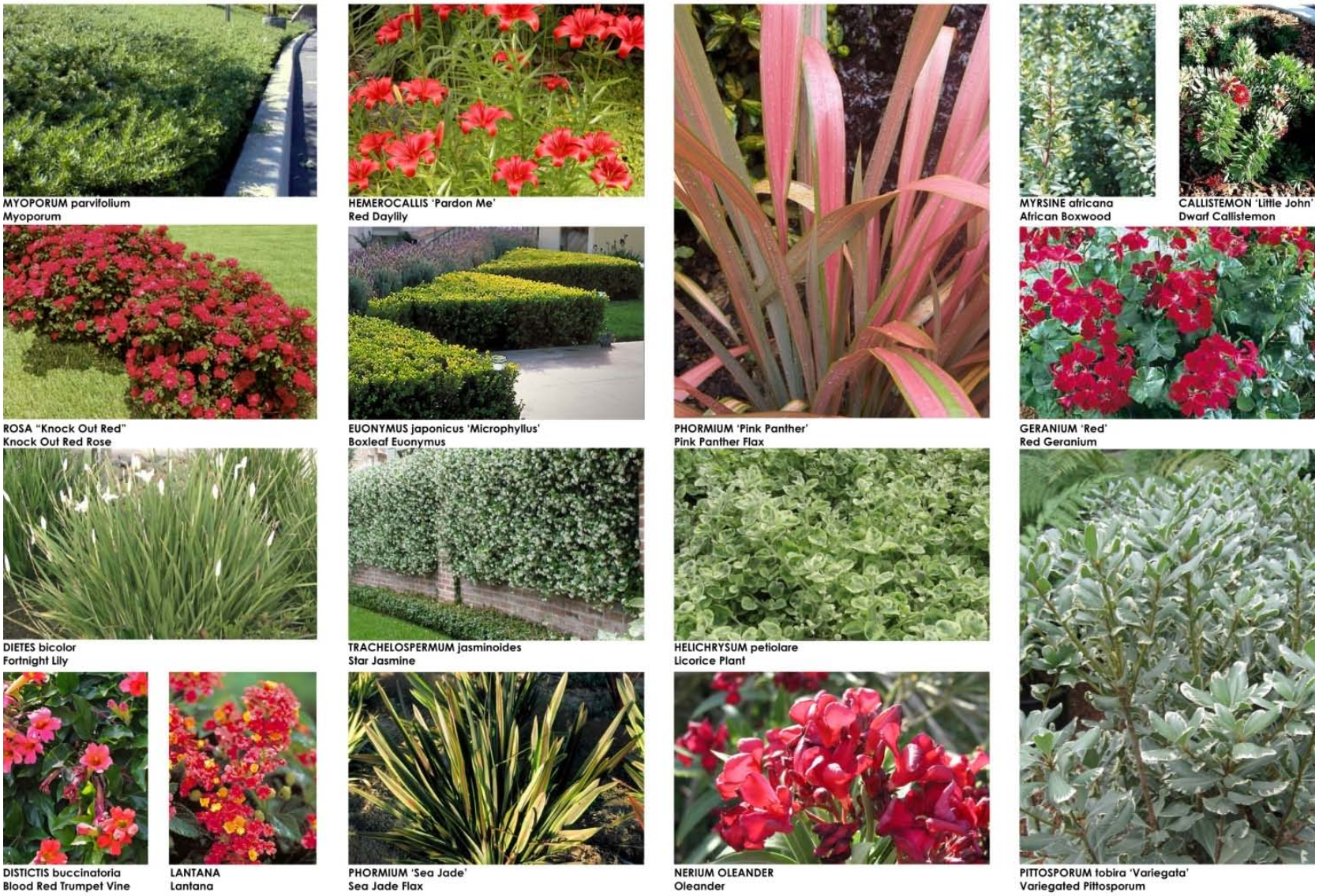


*Figure 16-1: Plant palette used for the sbX Green Line (continued)*

## 16.4 Growth Rate

Shade trees should be selected which produce a relatively mature canopy within 4 to 5 years of installation. Groundcovers should be selected to provide complete coverage within two years of installation. Once established, no plant material should need maintenance more than once a season in order to contain it within its designated planting area.

## 16.5 Environmental Adaptability

All plant material should have generally low water requirements, be hardy, long lived and resistant to disease. Long lived native plants are preferred. Soil testing should be performed to determine acceptable soil amendments and/or replacement of soils.

## 16.6 Tree Protection and Support

Existing trees that are healthy and attractive should be preserved whenever possible. Appropriate protection should be specified for trees that remain. Tree wells without grates are acceptable with Omnitrans approval. All new trees within pedestrian areas should be staked. For non-pedestrian areas, trees under 36" box size should be staked and roped with trees greater than 36" box size.

## 16.7 Irrigation

All planting areas should be irrigated during the establishment period. A permanent automatic irrigation system should be installed at all stations and park-and-rides where applicable. Water requirements should be considered in the selection of all plant materials. The design of irrigation components should focus on long-term low water usage, minimizing graffiti, and easy accessibility for maintenance personnel.

## 16.8 Relocating Trees

Provide tree protection barriers for those existing trees adjacent to any tree transplantation operations. Handle plant material to be transplanted only in ways and means accepted by the landscaping industry. Plants should be dug and prepared for moving in a manner that will not cause damage to branches, shape, root system, and development. Plant material should typically be planted the same day it is dug. Coordinate preparation of planting pits or beds to ensure this schedule.

Following transplantation, it is important to have a comprehensive watering and fertilizing schedule that includes watering the transplanted trees daily for the first two weeks, every other day for the next three weeks, and every third day for the balance of the determined watering/maintenance period. Such watering should thoroughly saturate the root ball to its full depth.

## 16.9 Maintenance

Landscape designs should minimize maintenance requirements. Maintenance-intensive treatments should be avoided. Lawns and other plant materials requiring intensive maintenance should be limited. Integration with existing acceptable plant materials and vegetation in adjacent areas should be emphasized.

Plant selection should consider mature plant size and correct spacing of plant materials minimizing pruning requirements. Planting design should consider ease of access by maintenance crews to plant materials during Omnitrans maintenance hours. Areas that require erosion protection should be landscaped with low-maintenance groundcovers.

Except where restoration of an existing landscape requires continuity and consistency, turf, formal hedges and espaliers should be avoided.

Plants that attract rodents and insects, excessive leaf litter and stains pavements should be avoided.

It should be the responsibility of the Cities and adjoining property owners to maintain landscaping once installed by Omnitrans Contractor and the Contractor's maintenance period has expired.

### 16.9.1 Corridor

Existing trees along the route should be protected in place unless they are to be displaced by new construction. Where feasible displaced healthy trees should be boxed and transplanted to other locations along the route. Choose species that define the route and complement existing species, as appropriate.

Street trees should be selected and spaced to conform to local requirements. Where no existing local requirements apply, selection and spacing should be approved by Omnitrans. Trees planted in paved pedestrian areas should be 24" box minimum. Trees should be spaced between 20' and 50' apart, depending on the species and local agency requirements.

### 16.9.2 Stations

Planting design for stations should include a mix of appropriate native and adapted drought tolerant plants, shrubs and groundcovers. The planting plan for the stations should attempt to provide as much landscape as feasible within the station site. Existing plant material should be retained, when appropriate.

### 16.9.3 Park-and-Ride lots

Shade trees should be provided in the parking lots between parking stalls, in the parking row-end islands or in stalls specifically designed for planting. Canopied trees reduce glare, reflection, heat, and the visual monotony of parking lots and provide a comfortable transition between the car and the station.

Entries to the stations may be emphasized by landscape elements determined by the designer (i.e. flowering specimen trees; masses of understory plants). Trees should be located, as appropriate, to provide useful shade in waiting, circulation and parking areas.

Trees should be located, as appropriate, around the perimeter of the parking lot and along pedestrian walkways leading to the station to achieve a visual impact and to emphasize the pedestrian routes to the stations.

Plantings should not obscure visibility from the street nor provide concealed areas within the parking lot.


*Figure 16-2: Photo of sbX Green Line Landscaping*

This Page Intentionally Left Blank