NO PARKING ZONE
30'-0" MINIMUM LENGTH OF VSCE TO 110'-0" FEET MAXIMUM (NOTE 3)

VSCE SURFACE DETENTION

4'-0" - 2'-0"
(MAY VARY)

2'-0" SPLASH PLATE

2'-6"

5'-0"

FOREBAY

5'-0"

12'-4" LANDSCAPE AREA

12'-4"

OUTLET APRON

2'-6"

(MAY VARY)

BEGINNING OF VSCE

EXISTING CURB & GUTTER FLOW LINE

EXISTING CURB & GUTTER FLOW LINE

INLET (SEE SECTION D-D SHEET 4)

FINISH SURFACE SPLASH PLATE (NOTE 16)

OPTIONAL: SURFACE FILTER FABRIC UNDER MULCH OR AGGREGATE

FINISH GRADE TO TOP OF CURB

FOLLOW

FLOW

VARY

VARIES

GUTTER FLOW LINE

OUTLET (SEE SECTION E-E SHEET 4)

FINISH SURFACE OUTLET APRON

END OF VSCE

TOP OF EXISTING CURB & GUTTER

FILTER FABRIC REQUIRED TO RETAIN FOREBAY SOILS IF PERVIOUS AREA 1 TOPSOIL IS REPLACED WITH AGGREGATE (SEE NOTES 18 & 21)

EXISTING SUBGRADE

STORAGE LAYER (OPTIONAL)

STORAGE LAYER (OPTIONAL)

VSCE PERVERSIOUS AREA (1)

VSCE PERVERSIOUS AREA (2)

IMPERMEABLE LINER, TYPICAL ON 4-SIDES SEE LINER ATTACHMENT (SEE DETAIL 4A)

TOPSOIL, TYPICAL (SEE S-480)

CONTINUE LINER TO MAXIMUM DEPTH OF VSCE

SECTION B - B
LONGITUDINAL SECTION 30'-0" PARKWAY SWALE

MAXIMUM LONGITUDINAL STREET SLOPE 2% TO 5% (5% SHOWN)

VSCE FINISH GRADE 1% TO 2%
DETAIL 3
CHECKDAM OPTION 1 - CLAY

OPTIONS FOR CHECKDAMS TO BE SELECTED BY DESIGNER BASED ON SITE SPECIFICS. SELECTED CHECKDAM TYPE, LOCATION, AND ELEVATION OF CHECK DAM SHALL BE SHOWN ON DESIGN PLANS. ALL OPTIONS SHALL USE CHECK DAM SPACING TABLE BELOW.

<table>
<thead>
<tr>
<th>VSCE LENGTH (FEET)</th>
<th>LONGITUDINAL STREET SLOPE</th>
<th># OF CHECK DAMS **</th>
<th>ADDITIONAL INLETS ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>&lt;=1%</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>&gt;1%</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td>31-50</td>
<td>&lt;=1%</td>
<td>1</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>&gt;1%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>51-70</td>
<td>&lt;=1%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>&gt;1%</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>71-90</td>
<td>&lt;=1%</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&gt;1%</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>91-110</td>
<td>&lt;=1%</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>&gt;1%</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

** CHECKDAMS ARE TO BE SPACED AT EQUAL DISTANCES BETWEEN INLET AND OUTLET (NOTE 3)
*** OPTIONAL: ADDITIONAL INLETS MAY BE LOCATED DOWNSTREAM OF CHECKDAMS.
DETAIL 3
CHECKDAM OPTION 2 - GRAVEL

TYPICAL SECTION
GRAVEL CHECKDAM
DETAIL 3
CHECKDAM OPTION 3 - CONCRETE

HORIZONTAL LAP SPlice #4 REBAR
12" FOR EMBEDMENT INTO CURB &
PLANTER WALLS.

BOTH SIDES PLANTER:
DRILL 5/8" DIA. INTO CONC. CURB,
INSERT DOWELLED REBAR WRAPPED
IN KRAFT PAPER. ADJUST REBAR
LENGTH AND TIE REBARS AS SHOWN.
POUR CONC. WALL TO ANCHOR
OPPOSITE ENDS.

EQUAL VSCE PERVIOUS AREA
EQUAL VSCE PERVIOUS AREA

TOP OF CURB

GUTTER FLOW LINE

FINISH GRADE

4" DEEP x 4" WIDE GROUTED COBBLE
STONE PAD (NOTE 10)

EXISTING SUBGRADE
OR ROCK STORAGE LAYER

TYPICAL SECTION
CONCRETE CHECKDAM
VSCE PLANTING TEMPLATES (SCHEMATIC*)

* SEE DESIGN PLANS AND DETAILS FOR ACTUAL PLANTING AREAS AND LAYOUTS. MAINTAIN A 6" MINIMUM PLANTING OFFSET FROM CURB AT BENCH EDGES. FOREBAY WITH PLANTING IN 18 INCHES OF TOPSOIL REQUIRED. VSCE PERVIOUS AREAS, AND ADDITIONAL PERVIOUS AREAS IN LONGER VSCE INSTALLATIONS (DIVIDED BY CHECKDAMS) MAY ALTERNATE OR COMBINE PLANTING TEMPLATES. ALTERNATIVE PLANTING LAYOUTS ALLOWED (NOTE 11). OPTIONAL: IN PERVIOUS AREAS OTHER THAN FOREBAYS, PLANT MATERIALS MAY BE OMITTED WHERE OPEN GRADED GRAVEL COMPLETELY REPLACES TOPSOIL.

PLANTING MATERIALS AND OBJECTIVES:
(SEE PLANT MATERIALS LIST ON SHEET 9)

- VRSE FOREBAY:
  REDUCE INFLOW VELOCITY, REDUCE EROSION. INSTALL WITH GRAVEL LAYER OVER 18 INCHES OF TOPSOIL AND INSTALL OPTIONAL GEOTEXTILE (NOTE 19)

- TYPE A:
  INCLUDES PLANTED FOREBAY. USE INUNDATION TOLERANT SPECIES WITH GROWTH FORMS THAT REDUCE INFLOW VELOCITY AND ROOTS THAT ASSIST IN EROSION CONTROL. INSTALL WITH MULCH OR PEAGRavel. OPTIONAL: EXTEND FOREBAY GEOTEXTILE SEPARATION LAYER OVER ENTIRE PERVIOUS AREA TO CHECKDAM.

- TYPE B:
  INUNDATION AND DROUGHT TOLERANT SPECIES WITH ROOT SYSTEMS THAT RESISTS EROSION. OPTIONAL: INSTALL WITH GEOTEXTILE & MULCH OR PEAGRavel.

- TYPE C:
  (FOR VSCE'S INCLUDING PARKWAYS OR VSCE TRANSITIONS BLENDING WITH TYPE 2 PLANT MATERIALS)
  USE LOW GROWING GROUNDCOVERS & GRASSES THAT MERGE WITH PARKWAY PLANTING. USE DROUGHT AND/OR INUNDATION TOLERANT SPECIES PER DESIGN PLANS. MULCH REQUIRED FOR ALL AREAS OTHER THAN TURF.
# PLANT MATERIALS LIST

CITY APPROVED PLANT MATERIALS: DESIGNER TO PROPOSE PLANT MATERIALS BASED ON SUITABILITY OF HYDROLOGY, SOILS, MICROCLIMATE AND IRRIGATION. SPECIES WILL BE CONTINUALLY REVIEWED FOR ADDING OR DELETING FROM LIST. SEE LATEST VERSION.

## VSCE FOREBAY

<table>
<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>COMMON NAME</th>
<th>APPROXIMATE MATURE HEIGHT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carex barbara</td>
<td>SANTA BARBARA SEDGE</td>
<td>12 inches</td>
<td>Low water</td>
</tr>
<tr>
<td>Carex buchananii</td>
<td>SLOUGH SEDGE</td>
<td>36 inches</td>
<td>Moderate water</td>
</tr>
<tr>
<td>Carex elat. &quot;Aurea&quot; var. 'Bowles Golden'</td>
<td>GOLDEN SEDGE</td>
<td>30 inches</td>
<td>Tolerates Standing water (long duration)</td>
</tr>
<tr>
<td>Juncus patens spp. var. &quot;Carmens Grey&quot; var. &quot;Eilk Blue&quot;</td>
<td>CALIFORNIA GREY RUSH</td>
<td>24 inches</td>
<td>Standing water (moderate duration)</td>
</tr>
</tbody>
</table>

## TYPE A

<table>
<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>COMMON NAME</th>
<th>APPROXIMATE MATURE HEIGHT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carex barbara</td>
<td>SANTA BARBARA SEDGE</td>
<td>12 inches</td>
<td>Low water</td>
</tr>
<tr>
<td>Carex buchananii</td>
<td>SLOUGH SEDGE</td>
<td>36 inches</td>
<td>Moderate water</td>
</tr>
<tr>
<td>Carex divuls. (C. tunicola)</td>
<td>FOOTHILL SEDGE</td>
<td>18 inches</td>
<td>Tolerates boggy to dry conditions</td>
</tr>
<tr>
<td>Carex elat. &quot;Aurea&quot; var. 'Bowles Golden'</td>
<td>GOLDEN SEDGE</td>
<td>30 inches</td>
<td>Tolerates Standing water (long duration)</td>
</tr>
<tr>
<td>Deschampsia cspitos.</td>
<td>TUFTED HAIR GRASS</td>
<td>24 inches</td>
<td>Moderate water. Salt tolerant varieties exist.</td>
</tr>
<tr>
<td>Deschampsia elongata.</td>
<td>SLENDER HAIR GRASS</td>
<td>20 inches</td>
<td>Moist clay conditions, moderate drought tolerance</td>
</tr>
<tr>
<td>Juncus mexicanus</td>
<td>MEXICAN RUSH</td>
<td>24 inches</td>
<td>Tolerates low to standing water (moderate duration)</td>
</tr>
<tr>
<td>Juncus patens.</td>
<td>CALIFORNIA GREY RUSH</td>
<td>24 inches</td>
<td>Tolerates low to standing water (moderate duration)</td>
</tr>
<tr>
<td>Raoulia australias</td>
<td>RAOUILIA</td>
<td>2 inches</td>
<td>Moderate water. Spreads quickly to 36-40 inches.</td>
</tr>
</tbody>
</table>

## TYPE B

<table>
<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>COMMON NAME</th>
<th>APPROXIMATE MATURE HEIGHT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arctostaphylos spp.</td>
<td>MANZANITA</td>
<td>(varies)</td>
<td>Low to moderate water. Use low growing species that naturalize.</td>
</tr>
<tr>
<td>Cotula coronopifolia or C. purpurea</td>
<td>COTULA</td>
<td>4 inches</td>
<td>Moderate water.</td>
</tr>
<tr>
<td>Melica imperfecta</td>
<td>COAST RANGE MELIC</td>
<td>12 - 36 inches</td>
<td>Wet to dry conditions. Naturalizes.</td>
</tr>
<tr>
<td>Mimulus guttatus (M. aurantiacus)</td>
<td>GOLD MONKEYFLOWER</td>
<td>18 - 36 inches</td>
<td>Moist conditions. Naturalizes. Use M. Aurantiacus for drier conditions.</td>
</tr>
<tr>
<td>Muhlenbergia rigens</td>
<td>DEERGRASS</td>
<td>24 - 36 inches</td>
<td>Moist to dry conditions. Naturalizes.</td>
</tr>
<tr>
<td>Penstemon spectabilis (or P. heterophylla)</td>
<td>SHOWY PENSTEMON</td>
<td>24 inches</td>
<td>Moist to dry conditions. Naturalizes.</td>
</tr>
<tr>
<td>Stenochlaenum bellum</td>
<td>BLUE-EYED GRASS</td>
<td>12-18 inches</td>
<td>Wet to dry conditions. Naturalizes.</td>
</tr>
</tbody>
</table>

## TYPE C

<table>
<thead>
<tr>
<th>SCIENTIFIC NAME</th>
<th>COMMON NAME</th>
<th>APPROXIMATE MATURE HEIGHT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achillea millifolium</td>
<td>YARROW</td>
<td>36 inches</td>
<td>Low to Moderate water.</td>
</tr>
<tr>
<td>Carex praegracilis</td>
<td>CLUSTERED FIELD SEDGE</td>
<td>4 -12 inches</td>
<td>Good turf substitute.</td>
</tr>
<tr>
<td>Chamaemelum nobile</td>
<td>CHAMOMILE</td>
<td>3-12 inches</td>
<td>Moderate water.</td>
</tr>
<tr>
<td>Duchessia indica</td>
<td>MOCK STRAWBERRY</td>
<td>4 inches</td>
<td>---</td>
</tr>
<tr>
<td>Dymondia margaritae</td>
<td>DYMONDIA</td>
<td>1 -2 inches</td>
<td>Wet to dry. Tolerates some foot traffic</td>
</tr>
<tr>
<td>Festuca glauca</td>
<td>BLUE FESCUE</td>
<td>12 - 24 inches</td>
<td>Moderate water.</td>
</tr>
<tr>
<td>Festuca californica</td>
<td>CALIFORNIA FESCUE</td>
<td>24 - 36 inches</td>
<td>Wet to dry conditions. Naturalizes.</td>
</tr>
<tr>
<td>Liloe spp.</td>
<td>LILY TURF</td>
<td>12-18 inches</td>
<td>Regular water required.</td>
</tr>
<tr>
<td>Solanerthus biffolius</td>
<td>AUSTRALIAN ASTROTURF</td>
<td>2-4 inches</td>
<td>Low water. Full to part sun. Spreads easily to 24 inches.</td>
</tr>
<tr>
<td>Sagina subulata</td>
<td>SCOTCH MOSS</td>
<td>3 - 6 inches</td>
<td>Regular water required.</td>
</tr>
<tr>
<td>Thymus pseudolanguinusus</td>
<td>WOOLY THYME</td>
<td>2 - 3 inches</td>
<td>Moderate water.</td>
</tr>
<tr>
<td>TURF SPECIES</td>
<td>(VARIES)</td>
<td>(VARIES)</td>
<td>Low to moderate water. Preferred for pedestrian traffic areas.</td>
</tr>
</tbody>
</table>

STANDARD PLAN NO. S-484-0 B-4641 SHEET 9 OF 11 SHEETS
DETAIL 4 A
IMPERMEABLE LINER ATTACHMENT

PIPE BOOT PER LINER MANUFACTURER (MATCH LINER MATERIAL)

CONDUIT OR PIPELINE PENETRATION

STAINLESS STEEL HOSE CLAMP

IMPERMEABLE LINER (SEE S-480)

WELD JOINT PER MANUFACTURER

CONCRETE AS APPLICABLE

DETAIL 4 B
PIPE BOOT AND PENETRATION THROUGH (IMPERMEABLE) LINER

PLAN

SECTION

DETAIL 4 C
PLANT PIT WITH PENETRATION THROUGH (PERMEABLE) GEOTEXTILE

3/4" PEA GRAVEL OR MULCH
APPROVED GEOTEXTILE

PLANT PIT

CUT LINER TO DIAMETER OF ROOTBALL
ROOT BALL BACKFILL

2"
NOTES:

1. VEGETATED STORMWATER CURB EXTENSION (VSCE) SHALL CONFORM TO SSPPC AS AMENDED BY "BROWNBOOK", LATEST EDITION. SEE STANDARD PLAN S-480 FOR SETBACKS, RESTRICTIONS AND GENERAL REQUIREMENTS.

2. VSCE SHALL INSTALL SUFFICIENT CHECK DAMS TO MAINTAIN OPTIMAL FINISH GRADINGS BETWEEN 1% (.01) TO 2% (.02) WITHIN VSCE LANDSCAPE AREAS. MAXIMUM LONGITUDINAL STREET SLOPE TO 5% (.05).

3. WHERE STRUCTURALLY FEASIBLE AND NO PARKWAY OBSTRUCTIONS INTERFERE OR REQUIRE CURB FOR LATERAL SUPPORT, WIDTH OF VSCE SHALL REMOVE EXISTING CURB AND GUTTER TO INCORPORATE THE ADJACENT PARKWAY AND FOLLOW SECTION A-A'. OTHERWISE THE TYPICAL SECTION MINIMUM WIDTH IS 3'-6" FROM INSIDE EXISTING AND NEW CURBS. WITH AN AVERAGE DEPTH OF 6" VSCE HAS AN ESTIMATED STORM WATER SURFACED DETENTION CAPACITY OF 30 PT. IN SATURATED SOILS. MINIMUM LENGTH 35 FEET, MAXIMUM LENGTH: 110 FEET WITH ADDED CHECKDAMS ACCORDING TO TABLE 1, SHEET 5.

4. GRADED SLOPES OVER 4" DROP PER 24" HORIZONTAL REQUIRE A 6" WIDE BY 4" HIGH WARNING CURB INSTALLED AT EDGE OF WALKWAY PAVING. LOCATE 4" WIDE CURB OPENINGS WITH 1" DROPS BELOW ADJACENT FINISH SURFACE IN WARNING CURB. SEE DESIGN PLANS FOR LOCATIONS.

5. LADOT REVIEW REQUIRED FOR ALL VSCE. LOCAL SERVICE AND RESIDENTIAL STREETS SHALL BE MARKED AS "NO PARKING". ADDITIONAL REQUIREMENTS MAY APPLY IF NO EXISTING SIDEWALK OR CURB & GUTTER IMPROVEMENTS EXIST.

6. THE ADJACENT PROPERTY OWNER ASSUMES ALL RESPONSIBILITY FOR VSCE OPERATION AND MAINTENANCE.

7. INSTALL (OPTIONAL) 4 INCH NOTCHED INLETS IN EXISTING CURB AS NEEDED TO DRAIN PARKWAY TO VSCE. MAINTAIN 1" MIN. DROP AS FREEBOARD FOR SIDEWALKS ABOVE THE MATCHING VSCE STATION FINISH GRADE. DESIGN PLANS TO SHOW LOCATIONS OF CURB INLETS, INLETS TO PROVIDE 1" DROP BELOW ADJACENT PARKWAY FINISH GRADE. SEE DESIGN PLANS FOR LOCATIONS.

8. CURB & PAVING MODIFICATIONS MAY BE NECESSARY TO MATCH EXISTING CONDITIONS AND/OR TO AVOID UTILITY CONFLICTS INCLUDING WATER LINES, METERS, ROOF DRAINS AND FIRE HYDRANTS.

9. VSCE SHALL NOT PROJECT INTO DRIVEWAYS OR CURB RAMP AREAS AND SHALL ADETOE TO ALL STREET VISIBILITY CLEARANCE REQUIREMENTS AND UTILITY SETBACKS, INCLUDING AS INDICATED IN S-480.

10. TEMPORARY IRRIGATION SYSTEM AND/OR HAND WATERING IS REQUIRED FOR PLANT ESTABLISHMENT. SEE DESIGN PLANS FOR IRRIGATION. IRRIGATION EQUIPMENT MAY BE OMITTED IF A STREET TREE WITH HOSE BIB IS INSTALLED PER S-611 AND IF THE ADJACENT PROPERTY OWNER ASSUMES ALL RESPONSIBILITY FOR HAND WATERING OF VSCE.

11. DESIGNER TO PROPOSE PLANTING PLAN FOR EROSION CONTROL ON ALL AREAS OF TOPSOIL. STREET TREE PLANTING IN PARKWAY AREA IS TO BE PER STANDARD PLAN S-456 WITH CITY APPROVAL.

12. A STREET SIDE CURB RADIUS OF 25 IS REQUIRED FOR COMPLETE STREET SWEEPING FROM GUTTER TO FACE OF CURB. A CURB RADIUS OF 10 FT IS ALLOWABLE TO INCREASE AREA OF THE STORAGE/DETENTION AREA ONLY IF THE ADJACENT PROPERTY OWNER ASSUMES FULL RESPONSIBILITY FOR ANY GUTTER MAINTENANCE AS MAY BE REQUIRED DUE TO LACK OF STREET SWEEPING.

13. MODIFICATIONS TO EXISTING STREET PAVING: COLD PLANE AND OVERLAYS ASPHALT OR COMPLETELY RECONSTRUCT PAVING AS NECESSARY TO RESTORE A SMOOTH TRANSITION AND STREET CROWN (STANDARD PLAN S-433, SIMILAR). MATCH PAVING MATERIALS AND THICKNESS. SEE S-410 FOR STANDARD CURBS & GUTTERS, AND WARPS NEW GUTTER TO JOIN INVET AT INLET.

14. WHERE NOTED, PERMEABLE NON-WOVEN GEOTEXTILE TO BE INSTALLED BELOW MULCH OR GRAVEL FOR EROSION CONTROL. (SEE DETAIL 4-C, SHEET 10 FOR PLANTING THROUGH GEOTEXTILE).

15. CONSTRUCT CONCRETE SIDEWALK WHEN SPECIFIED ON PLAN. SIDEWALK MINIMUM CLEARANCE 48".

16. INSTALL SPLASH PLATE AND/OR OUTLET APROP TO REDUCE EROSION ENERGY AND TO MAINTAIN FLOWS. WHERE OMITTED EXTEND FOREBAY TO INLET, OR LANDSCAPING TO OUTLET. MAY BE FURTHER WARPED OR MODIFIED IN DESIGN DETAILS AS NEEDED FOR SOIL RETENTION. BOTH ENDS TO BE PLANTED LATERAL AND CROSS SLOPE CONTOURS OF VSCE PER DESIGN CROSS SECTION.

17. ALL CONCRETE & SIDEWALKS SHALL BE CLASS 550-C-1500 PORTLAND CEMENT CONCRETE. INSTALL CONTRACTION, EXPANSION AND WEAKENED PLANE JOINTS IN CONCRETE PER S-480 & S-430.

18. IF CALLED FOR ON PLAN, GROUTED 1 TO 3 INCH COBBLES TO BE INSTALLED ON CONCRETE SPLASH PLATE AND APROP FOR ADDED EROSION DISSIPATION OR ADESSES TO INCLUDE STONE, THREE PART SAND, AND THE MINIMUM AMOUNT OF WALTER NECESSARY FOR THE MIXTURE TO FLOW UNDER ITS OWN WEIGHT. COBBLE STONES SHALL BE SUFFICIENTLY EMBEDDED IN GROUTING BEDS TO REMAIN PERMANENTLY FIXED AFTER CURING. WHERE COBBLES ARE USED, ADJUST BOTTOM ELEVATION OF CONCRETE TO MAINTAIN THE SURFACE ELEVATION INDICATED ON STANDARD PLAN.

19. AGGREGATES FOR USE IN FOREBAY AND CHECK DAMS SHALL CONSIST OF WASHED FRACTURED FACE SAN GABRIEL RIVER AGGREGATES CERTIFIED UNREACTIVE BY A CERTIFIED TESTING LABORATORY PER SSPPC SECTION (251-1.2.2) AND PER S-480. AGGREGATES SHALL REQUIRE ONSITE BCA INSPECTION. AGGREGATES MAY REPLACE TOPSOIL IN VSCE PERVERS AREAS (EXCEPT FOREBAY- SEE NOTE 22). AGGREGATE SHALL BE 1" OPEN GRADED FOR STORAGE, AND PER S-480 FOR SURFACE APPLICATION AND EROSION CONTROL.

20. MINIMUM RELATIVE COMPACATION OF EARTHWORK UNDER NEW PAVING SHALL BE PER SSPPC. SEE S-460 FOR FURTHER REQUIREMENTS.

21. THE SOURCE OF IMPORT SOIL SHALL BE PER S-460 AND AS APPROVED BY THE PROJECT MANAGER PRIOR TO START OF ANY GRADING OPERATIONS. CONTRACTOR MAY BE REQUIRED TO PROVIDE AGRICULTURAL SUITABILITY (GROWTH TESTS) TO ESTABLISH SOIL SUITABILITY FOR PLANTING. ANY SOILS LAB RECOMMENDED AMENDMENT OF EXISTING SOILS SHALL BE INCLUDED WITH PROJECT.

22. FOREBAY SHALL BE PLANTED WITH INFUNDATION TOLERANT SPECIES FROM 1-GALLON SIZE CONTAINERS PER PLANTING TEMPLATE AND PLANT MATERIALS LIST. DESIGN PLANS MAY INCLUDE ADDITIONAL SURFACE EROSION CONTROL MEASURES SUCH AS GEOTEXTILE FABRIC UNDER MULCH OR GRAVEL AS RECOMMENDED FOR THE SPECIFIC INSTALLATION. FOREBAY REQUIRES TOPSOIL CONTAINMENT BY GEOTEXTILE IF GRAVEL REPLACES TOPSOIL IN PERVERS AREAS. MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO THE USE OF GEOTEXTILE FABRIC TO CONSTRUCT A ROLLED BERM AROUND FOREBAY ROCK MEDIA AND OVERLAY OF FOREBAY WITH GRAVEL USING THE BERM TO PREVENT THE SURFACE ROCK FROM MIGRATING INTO THE MULCH AREA. THE COMPLETE FOREBAY INCLUDING PLANTS AND SEDIMENTS SHALL BE REMOVED FOR REGULAR MAINTENANCE WHEN INFILTRATION RATES FAIL TO MEET THE MINIMUM REQUIREMENTS. ADDITIONAL DETAILS FOR ANY NECESSARY AND PROPOSED METHODS, INCLUDING PLANT DETAILS, ARE TO BE INCLUDED ON DESIGN PLANS FOR CITY REVIEW.

23. CONSTRUCT WARNING CURB AT EXISTING CURB & GUTTER WHERE CALLED FOR ON PLANS. DRILL INTO TOP OF EXISTING CURB AND INSERT #3 REBAR WITH EPOXY AT 12" O.C. FORM AND FOUR CONCRETE TO RAISE EXISTING CURB BY 6" WITH 4" WIDE DRAINAGE OPENINGS AS NEEDED. A WARNING CURB IS REQUIRED TO MEET ADA GUIDELINES ALONG WALKWAYS THAT ABUT GRADINGS GREATER THAN 4 INCHES VERTICAL TO 24 INCHES HORIZONTAL INSTALL 1:1 RETURN SLOPE ON WARNING CURB AT BOTH ENDS.

24. PROVIDE OBSERVATION WELL IF DIRECTED BY CITY ENGINEER (SEE S-480).