

904 Landscape Opportunity Plan

904.1 General

This chapter provides the criteria and requirements for development of Landscape Opportunity Plan. These sheets are used for coordination purposes between projects, and between the various disciplines of a project. Do not place the Landscape Opportunity Plan sheets within the Contract Plans Set. Signing and sealing the Landscape Opportunity Plan is not required.

A Landscape Opportunity Plan is prepared when landscape is not part of a roadway construction project, but landscaping will be installed:

- (1) Within a subsequent stand-alone landscape project.
- (2) As part of a simultaneous JPA or LAP project.
- (3) Within a future safety or roundabout project.

A Landscape Opportunity Plan is typically prepared during the roadway concept plan development, but when developed during the design phase should be preliminary by Phase II submittal, complete at Phase III, and final at Phase IV. Coordinate with other disciplines (e.g., Roadway, Utility, Drainage, Signage, ITS, R/W) when developing the Landscape Opportunity Plan.

Submit the completed Landscape Opportunity Plan to the Department Project Manager and District Landscape Architect. Place the completed Landscape Opportunity Plan in Project Suite Enterprise Edition (PSEE) within the Design Development Documentation Module (see **FDM 111.7**).

See **Exhibit 904-1** for an example of a Landscape Opportunity Plan sheet.

904.2 Landscape Opportunity Plan Development

A Landscape Opportunity Plan identifies areas within the upcoming roadway project that should be set-aside or prepared for the future landscape project. Common areas are:

- areas requested by a municipality
- median plantings or other safety enhancements
- high-visibility areas or embankments, or areas adjacent to barriers or sound walls

- scenic highways or areas programmed for Highway Beautification Grants
- areas indicated in the District's Landscape Branding Document

904.3 Landscape Opportunity Plan Sheet

The Landscape Opportunity Plan sheet provides a plan view of the project illustrating the intent of the future landscape project. This sheet is typically produced on large format sheets (24"x36", 36"x48" or 36"x72"). Use landscape orientation regardless of sheet size selected. Use standard symbols contained in the [CADD Manual](#).

The standard horizontal scale is 1" = 100', however an alternate scale may be approved by the Project Manager.

Provide a legend, notes, and details as needed.

904.4 Required Information

Display aerial photography or available topographic surveys as gray scaled in the background. Information from a prior construction project may also be used. Display and label elements that are relevant to the future landscape design, including:

- Proposed improvements and existing elements to remain
- Existing vegetation or areas to remain undisturbed
- Wetland jurisdictional lines
- Drainage retention areas
- Utilities
- Outdoor advertising view zones

The Landscape Opportunity Plan provides requirements for the development of roadway design to support a future landscape design. Locations of landscape opportunity planting areas are typically illustrated in a bubble format which identifies various vegetation groupings in a hatched or colorized manner (e.g., "trees/palms/shrubs", "shrubs only", "buffer plantings").

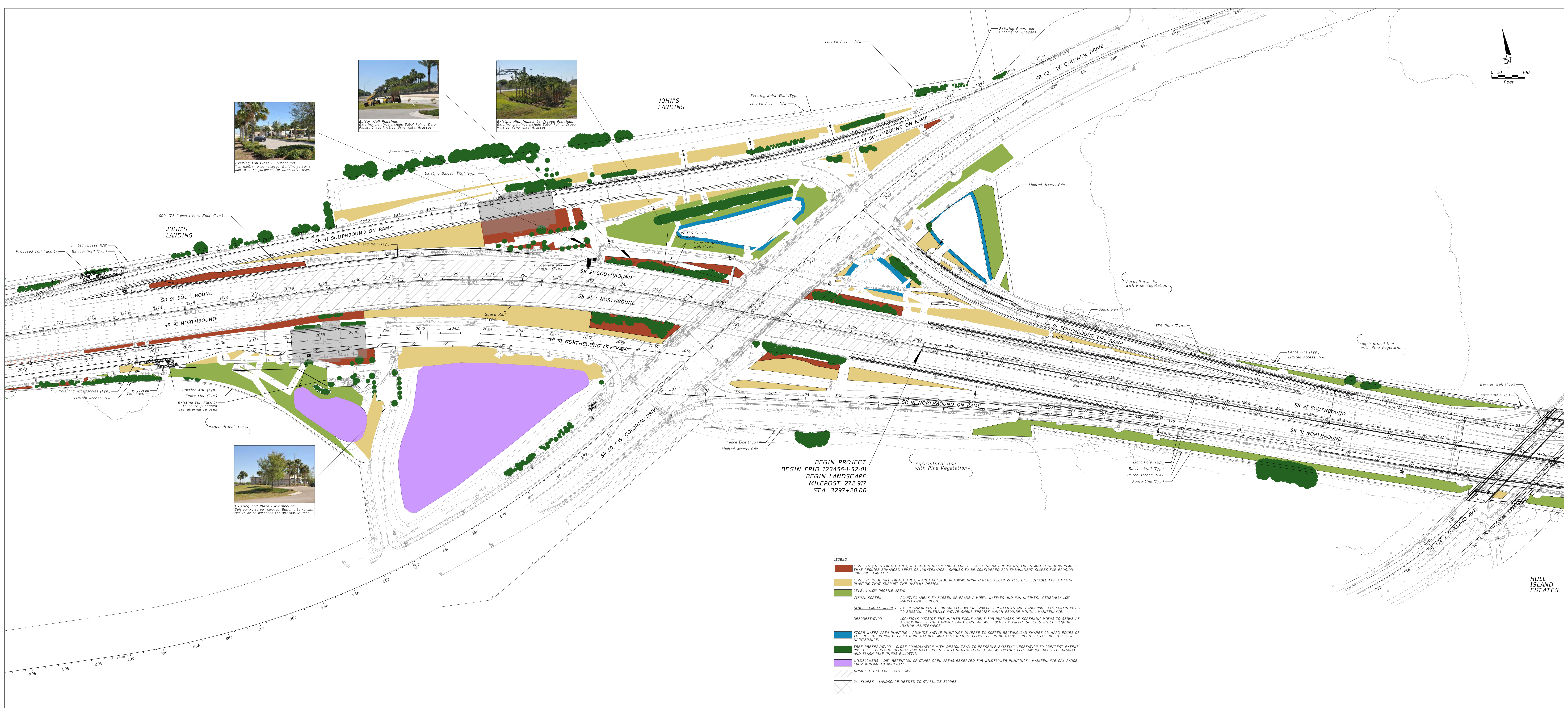
The Landscape Opportunity Plan should also identify or designate the following:

- (1) Essential elements of landscape design intent.

- (2) Anticipated location of irrigation sleeves. See **FDM 271.3** for irrigation sleeve requirements.
- (3) Preservation areas. Preserve existing trees and vegetation, and natural vistas to the greatest extent possible.
- (4) Areas requiring soil amendments. Assure landscape areas will have soil suitable for plants viability.
- (5) Areas to be set aside to accommodate future plantings considering visibility, clear zone and site distance requirements, and maintenance. Provide adequate space (both above and below ground) for plant growth. Delineate areas in bubble format and indicate as high, medium, or low priority, such as:
 - (a) Areas with trees and shrubs for screening distracting views
 - (b) Trees to frame desirable views
 - (c) Trees and ground cover areas for stabilization of embankments
 - (d) Trees to shade sidewalks
 - (e) Shrubs for pedestrian channelization
- (6) Use of Select Clearing and Grubbing to preserve the existing and future landscape planting areas and to relocate trees.
- (7) Display applicable clear zone, horizontal clearance, setback dimensions on the plans which reflect AASHTO, FDOT, and Department guidelines for landscape installation and maintenance operations.
- (8) Indicate potential areas for wildflower plantings.
- (9) Objectionable and desired views.
- (10) Location of Outdoor Advertising sign faces and view zones within project limits; see **FDM 276**.

904.5 Optional Summary of Analysis

At the Districts discretion, provide a Summary of Analysis in a graphic and written format.



LEGEND

- LEVEL III (HIGH IMPACT AREA) - HIGH VISIBILITY CONSISTING OF LARGE SIGNATURE PALMS, TREES AND FLOWERING PLANTS THAT REQUIRE FREQUENT LEVEL OF MAINTENANCE. SHOULD BE CONSIDERED FOR ENHANCEMENT SCOPES FOR DESIGN CONTROL STABILITY.
- LEVEL II (MODERATE IMPACT AREA) - AREA OUTSIDE ROADWAY IMPROVEMENT, CLEAR ZONES, ETC. SUITABLE FOR A MIX OF PLANTING THAT SUPPORT THE OVERALL DESIGN.
- LEVEL I (LOW PROFILE AREA) - PLANTING AREAS TO SCREEN OR FRAME A VIEW. NATIVES AND NON-NATIVES. GENERALLY LOW MAINTENANCE SPECIES.
- VISION SCREEN - ON ENHANCEMENTS 2.1 OR GREATER WHERE ROWING OPERATIONS ARE DANGEROUS AND CONTRIBUTES TO EROSION. GENERALLY NATIVE SHRUB SPECIES WHICH REQUIRE MINIMAL MAINTENANCE.
- REGENERATION - LOCATIONS OUTSIDE THE HIGHER FOCUS AREAS FOR PURPOSES OF SCREENING VIEWS TO SERVE AS A BACKDROP TO HIGH IMPACT LANDSCAPE AREAS. FOCUS ON NATIVE SPECIES WHICH REQUIRE MINIMAL MAINTENANCE.
- STORM WATER AREA PLANTING - PROMOTE NATIVE PLANTINGS DIVERSE TO SOFTEN RECTANGULAR SHAPES OR HARD EDGES OF THE RETENTION PONDS FOR A MORE NATURAL AND AESTHETIC SETTING. FOCUS ON NATIVE SPECIES THAT REQUIRE LOW MAINTENANCE.
- TREE PRESERVATION - CLOSE COORDINATION WITH DESIGN TEAM TO PRESERVE EXISTING VEGETATION TO GREATEST EXTENT POSSIBLE. NON-AGRICULTURAL DOMESTIC SPECIES WITHIN PROTECTED AREAS INCLUDE LIVE OAK (QUERCUS VIRGINIANA) AND SLASH PINE (PINUS ELIOTTII).
- WILDLIFE CORRIDORS - OPEN RETENTION OR OTHER OPEN AREAS RESERVED FOR WILDLIFE PLANTINGS. MAINTENANCE CAR RANGE FROM MINIMAL TO MODERATE.
- IMPACTED EXISTING LANDSCAPE
- 2:1 SLOPES - LANDSCAPE NEEDED TO STABILIZE SLOPES

LANDSCAPE SETBACK

PLANT TYPE	Number of Plants	Multiple Plant Spacing	Asymmetrical & Single Line Planting	Side Road Travel Lane (With 10' Curb)	Bank of Shoulder	M.S.E. AND Noise Walls	HWY FENCE	Change Structures	City Stormwater Facilities	Waterways, Storm Water Basins and Wet Detention Facilities (For Retention of High Water Flow)	Maintenance Underground Utilities	Overhead Wires (4)	Gas	Light Pole Storage Pole (5) (6)	ITS Poles (8)	ITS Sign Control Box and Lighting Conduit
CANOPY TREES	30'	10' (10')	10' (10')	6'	10' (2)	10'	10'	10'	10'	10'	10'	medium/2' large/2'	20'	20'	20'	7'
PALMS & NARROW TREES	30'	10' (10')	10' (10')	6'	6'	6' (3)	6' (3)	10'	0'	10'	9'	10' or max. palm height + 2' if mixed tree/shrubs	15'	10'	20'	5'
SHRUBS & ORNAMENTAL GRASSES	20'	4'	4'	4'	6'	4' (3)	4' (3)	0'		10'	NA	NA	4'	6'	NA	

SETBACK NOTES:

- (1A) LESS THAN 45 MPH SPEED LIMIT.
- (1B) 45-50 MPH SPEED LIMIT.
- (1C) 50 MPH SPEED LIMIT.
- (1D) GREATER THAN 55 MPH SPEED LIMIT.
- (2) DISTANCES MAY BE GREATER DEPENDING ON THE MAINTAINED TREE SPECIES CANOPY WIDTH AND HEIGHT. VERIFY DIMENSIONS AS APPLICABLE.
- (3) REFERENCED ON AVAILABLE LANDSCAPE AREA.
- (4) COMPLY WITH UTILITY COMPANY GUIDELINES AS APPLICABLE PERTAINING TO UNDERGROUND AND OVERHEAD UTILITIES AND TRANSFORMER.
- (5) DIMENSIONS SHOWN ARE FROM LIGHT AND SIGN STRUCTURES. NO TREES OR PALMS WILL BE PLANTED WITHIN 5' OF SIGN.
- (6) SIGNAGE SETBACKS TO ADDRESS SIGN FROM FACILITY ONLY. ITS SETBACK TO ADDRESS VIEW TO ROADWAY ONLY.
- (7) FOR THE WALL, NO LANDSCAPE WILL BE INSTALLED ON THE FILL SIDE OF THE WALL WHERE STRAPS ARE PLACED. VERIFY ALL STRAP LOCATIONS. SETBACKS SHOWN ARE TO END OF STRAPS.

- GENERAL NOTES:**
- THE FDOT STUDY ENDING AT RP 273 (SR 91 - SR 50 INTERCHANGE) MAY AFFECT DESIGN CONSIDERATIONS DELINEATED ON THE LANDSCAPE OPPORTUNITY PLANS.
 - THE LANDSCAPE OPPORTUNITY PLANS PROVIDE UTILITY INFORMATION, FINAL ROADWAY ALIGNMENTS, GUARD RAILS, BARRIER WALL AND OTHER IMPROVEMENTS THAT ARE SUBJECT TO CHANGE. THE OFFSETS SHOWN ON THE PLANS MAY REQUIRE CHANGE TO REFLECT THE FINAL DESIGN.
 - MAINTAIN THE PRESERVATION AND PLANTING AREAS SHOWN IN THE LANDSCAPE OPPORTUNITY PLANS TO THE GREATEST EXTENT POSSIBLE.
 - FINAL DESIGN MUST COMPLY WITH THE FDOT DESIGN MANUAL, FDOT STANDARD PLANS, APPLICABLE STANDARD SPECIFICATIONS, AND THE SETBACK GUIDELINES.
 - PRESERVE AND PROTECT EXISTING TREES AND VEGETATION ALONG THE PROJECT CORRIDOR THAT IS NOT IN CONFLICT WITH PROPOSED IMPROVEMENTS. COORDINATE THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES THROUGHOUT THE ROADWAY DESIGN DEVELOPMENT.
 - UPDATE LANDSCAPE OPPORTUNITY PLANS DURING FINAL DESIGN AS NEEDED.
 - NO PROPOSED PLANTINGS ARE TO BE LOCATED WITHIN FEDERAL OR STATE JURISDICTIONAL WETLANDS OR OTHER SURFACE WATERS OPEN WATER BODIES. THE DESIGN OF HIGH WATER OR DITCHES THE BOTTOM OF STORM WATER MANAGEMENT FACILITIES.
 - NO FACULTATIVE WET OR OBLIGATE SPECIES ARE TO BE PLANTED WITHIN 25' OF WETLAND OR OTHER SURFACE WATERS.

POTENTIAL PLANT PALETTE

BOTANICAL NAME	COMMON NAME	LEVEL I	LEVEL II	LEVEL III	GRASSY	STORM WATER	USES
CANOPY TREES							
<i>Acer rubrum</i>	Red Maple	x	x			x	Storm water area, visual screen
<i>Pinus elliotii</i>	Slash Pine	x				x	Reforestation, visual screen
<i>Pinus taeda</i>	Loblolly Pine	x				x	Reforestation, visual screen
<i>Quercus virginiana</i>	Live Oak	x	x				Reforestation, visual screen
<i>Taxodium distichum</i>	Bald Cypress					x	Storm water area, visual screen
<i>Ulmus alata</i>	Winged Elm	x				x	Visual screen
TREES - SMALL							
<i>Ilex opaca</i>	American Holly	x	x			x	Visual screen
<i>Juniperus silicicola</i>	Southern Red Cedar	x				x	Visual screen
<i>Lagerstroemia indica</i>	Lavender Crape Myrtle		x	x	x		Accent color
<i>Lagerstroemia indica</i>	White Crape Myrtle		x	x	x		Accent color
<i>Lagerstroemia indica</i>	Red Crape Myrtle		x	x	x		Accent color
<i>Nagnolia grandiflora</i>	Southern Magnolia	x	x	x	x		Dense color and texture
<i>Myrica cerifera</i>	Wax Myrtle	x	x			x	Visual screen
<i>Nyctanthes fragrans</i>	Simpson's Stopper	x	x			x	Visual screen
<i>Pinus umbellata / angustifolia</i>	Christmas Palm	x	x	x	x		Accent color
PALMS							
<i>Boroporus noblesiana</i>	Beauty Wale Palm		x	x			High impact accent
<i>Sabal lewisianum</i>	Puerto Rican Palm			x			High impact accent
<i>Sabal palmetto</i>	Cabbage Palm	x	x	x			Continuity
<i>Phoenix dactylifera</i>	Medjool Date Palm			x			High impact accent
<i>Phoenix syriensis</i>	Sylchester Date Palm			x			High impact accent
PALMS - SMALL							
<i>Buriti copifera</i>	Pineau Palm	x	x	x			High impact
<i>Chamaecyparis thumii</i>	European Fan Palm		x				Visual screen accent
<i>Livistona chinensis</i>	Chinese Fan Palm		x				Visual screen accent
<i>Phoenix roebelenii</i>	Pagoda Palm		x	x			Visual screen accent
SHRUBS							
<i>Ilex umbellata</i>	Tragop Holly	x	x			x	Visual screen
<i>Viburnum obtusum</i>	Water's Viburnum	x	x			x	Reforestation, visual screen
SHRUBS - SMALL							
<i>Muhlenbergia capillaris</i>	Mulley Grass	x	x	x	x		Visual screen, slope stabilization, erosion control
<i>Serenoa repens</i>	Saw Palmetto	x	x	x	x		Visual screen, slope stabilization, erosion control
<i>Serenoa repens</i>	Silver Saw Palmetto	x	x	x	x		Visual screen, slope stabilization, erosion control
<i>Spartina bakeri</i>	Cord Grass	x	x	x	x		Visual screen, slope stabilization, erosion control
<i>Zamia pumila</i>	Coontie Palm	x	x	x	x		Visual screen, slope stabilization, erosion control

ABBREVIATION INDEX

ABBREVIATION	DESCRIPTION	CLEAR ZONE - MINIMUM SETBACKS FOR TREES & PALMS
DOF	ROADWAY DESIGN OFFSET	SET FROM BACK OF SHOULDER (WITHIN 10' OF CURB)
FL	FLIGHT LINE	SET FROM BACK OF SHOULDER (WITHIN 10' OF CURB)
FCAL	FLIGHT LINE CLEARANCE	SET FROM BACK OF SHOULDER (WITHIN 10' OF CURB)
FL	FLIGHT LINE	SET FROM BACK OF SHOULDER (WITHIN 10' OF CURB)
SPR	SPREAD	SET FROM BACK OF SHOULDER (WITHIN 10' OF CURB)