



Land Development Design Standards Manual

Palm Beach County – Department of Engineering
and Public Works

Effective: August 1, 1990

Revised: October 20, 1993

February 2018

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Introduction

The purpose of this Manual is to establish uniform minimum standards for the design and construction of Required Improvements acceptable to the County.

The standards established by this Manual are applicable to all developments. While it may not always be feasible to apply these standards to reconstruction or upgrading of existing infrastructure due to limitations imposed by existing structures, ownership, and land use, these standards will be applied to the extent that legal, economic and environmental considerations allow.

Variations from these standards must be approved pursuant to Article 11.B.6.C of the Regulations. See Alternative Design, Construction Standards, and Types of Materials under Administration of Manual and Regulations.

Objectives

These standards are intended to provide the basic guidelines for provision of adequate infrastructure which:

- provides the safest practicable environment for motorists, cyclists, pedestrians and workers;
- provides reasonable operating characteristics consistent with the capabilities of vehicles, drivers, cyclists, pedestrians and workers;
- provides uniformity and consistency in the design and operation of the streets;
- provides for future modification and expansion of the Major Street Network;
- promotes smooth traffic flow and efficiency.

Engineer of Record

The Engineer of Record is a single professional engineer or engineering firm licensed in the State of Florida to engage in the practice of engineering under F.S. 471.001 – 471.037. The Engineer of Record is engaged by the Developer to coordinate the design of the project to meet all applicable standards and regulations and to monitor the construction of the work based on their design. Any engineering practices and procedures set forth in this guide shall be implemented by a licensed professional engineer in accordance with Florida statutes.

The Engineering Department does not have jurisdiction to perform inspections on private property. It is the sole responsibility of the Engineer of Record to ensure that approved drainage design is installed correctly and to notify the Land Development Division of any changes or modifications deemed necessary in the field prior to the installation of any modifications.

Per Florida statutes, all items signed and sealed by the Engineer of Record must clearly contain on the plans or application his or her name, business address, license number, date and authorization number.

Definitions

AASHTO: The American Association of State Highway and Transportation Officials

County Standards: The regulations and details set forth in this Manual and encompasses all the design standards, regulations and requirements from the Palm Beach County Engineering Department including the Land Development Division, Roadway Production Division, Streetscape Section and Traffic Division

FDOT Design Standards: Florida Department of Transportation's Design Standards Manual for design, construction, maintenance and utility operations on the state highway system

FDOT Drainage Standards: Florida Department of Transportation's Design Standards Manual for design, construction and maintenance of drainage on the state highway system

FDOT Utility Accommodation Manual: Florida Department of Transportation's Design Standards Manual for design, construction and maintenance of utilities in the state highway system

FDOT Greenbook: The Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways of the State of Florida as promulgated and revised from time to time by the Florida Department of Transportation

Legal Positive Outfall: A permanently established connection of stormwater discharge conveyance facility serving a development site to a watercourse or water body under the control and jurisdiction of one or more public agencies, said connection being subject to all applicable agency permitting and approval requirements

Regulations: The Subdivision, Platting and Required Improvements, Article 11, as well as other articles, Unified Land Development Code (ULDC) of Palm Beach County, as amended from time to time

Required Improvements: For the purpose of this Manual, the term shall be limited to those improvements which represent the infrastructure of a development; namely access/streets, water management/drainage, water, sewer, and parks and open space

Road Maintenance Inventory: The Roadway Production Division list of all Palm Beach County maintained rights of way

SFWMD Standards: The policies and standards adopted by the South Florida Water Management District, including those as set forth in the Environmental Resource Permit Information Manual and Basis of Review

Streetscape Standards Manual: The policies and standards adopted and promulgated from time to time by the Streetscape Section

Thoroughfare Road Design Procedures: The policies and standards adopted by Roadway Production Division

Traffic Design Standards: The policies and standards adopted and promulgated from time to time by the Traffic Division

WUD Standards: The policies and standards adopted and promulgated from time to time by the Palm Beach County Water Utilities Department

Other Regulations, Ordinances, Laws and Manuals

The criteria and standards set forth in other manuals which have been included by reference herein shall be considered part of this Manual.

Applicable State and County environmental laws and regulations should be considered concurrently with this text. When there is a conflict between two or more specific standards within a law, rule, regulation, ordinance, resolution, code or policy, the most restrictive or that imposing the higher standard shall apply.

Administration of Manual and Regulations

1. Administrator and Amendments

The Director of Land Development has been designated as the administrator of this Manual and the Regulations. This authority includes the obligation to review, render interpretations of and administer staff review of this Manual.

2. Classification of Streets

a. New Streets

Each proposed street shall be classified and designed for its entire length to meet or exceed the minimum design standards described in the Regulations and this Manual.

b. Existing Streets

Each existing street providing access to or within the Subdivision Plan shall be classified according to its function, design and use as required by the Regulations. If the standards in the Regulations for the assigned classification cannot be met due to proposed traffic from the development, the Developer shall bring the existing street into compliance with the standards or redesign the development to exclude or abandon the existing street or reduce the impact such that the existing street will conform to the minimum standards.

c. Time of Classification

1. Initial Classification: Classification of all streets providing lot access and traffic circulation within a proposed subdivision shall occur, when practicable, at time of Final Subdivision Plan approval. When the Subdivision Plan does not depict all proposed streets, as in the case of a Master Plan for Planned Development Districts, classification shall also occur at time of approval of the Final Subdivision Plan for each phase of development.
2. Verification of Classification: The street classifications shall be verified and, if necessary, adjusted prior to issuance of Technical Compliance for each subsequent plat within a phased Final Subdivision Plan.

d. Unplatted Properties

When unplatted or undeveloped lands abut a proposed subdivision, the following guideline shall apply to the design of the proposed subdivision:

1. When the unplatted or undeveloped parcel has no foreseeable means of obtaining access to a Major Street other than through the proposed subdivision, the street and pedestrian systems of the proposed subdivision shall be designed to permit for future extension of the systems to serve such parcel.
2. The traffic generation rate for the unplatted or undeveloped parcel shall be equal to that which would be assigned to the parcel if the parcel was developed to the maximum density or intensity permitted under the Comprehensive Plan.
3. When the potential traffic generation from the unplatted or undeveloped parcel would require construction of a higher classification of street than necessary to serve the traffic to be generated by the proposed subdivision, the Developer may be permitted, at the sole discretion of the County Engineer, to plat the right of way for the higher classification and construct the street at the lower classification.

3. Alternate Design, Construction Standards and Types of Materials

Reference Article 11.B.6.C

Application for alternate design, construction or type of material shall be made to the County Engineer and approval of such material shall be obtained prior to construction plan submittal. Application shall be by written request and shall be accompanied by data, calculations and analyses in accordance with the accepted engineering methods demonstrating that the proposed alternative is equal to or superior to that for which it is substituted.

Detail Drawings

1. Drawing Identification

The details contained in this Manual are identified by the “drawing number” appearing in the far right-hand block of the title block at the bottom of the drawing.

2. Number System

The drawing number consists of the 3-digit section number, a decimal, and a 1- or 2-digit number, and in some instances, a hyphen and letter. The 3-digit number corresponds to the section of the Manual to which the drawing is assigned. The 1- or 2-digit number and the letter is assigned to each drawing within a particular section. A letter is assigned when a particular drawing has more than one alternative of design, construction or installation.

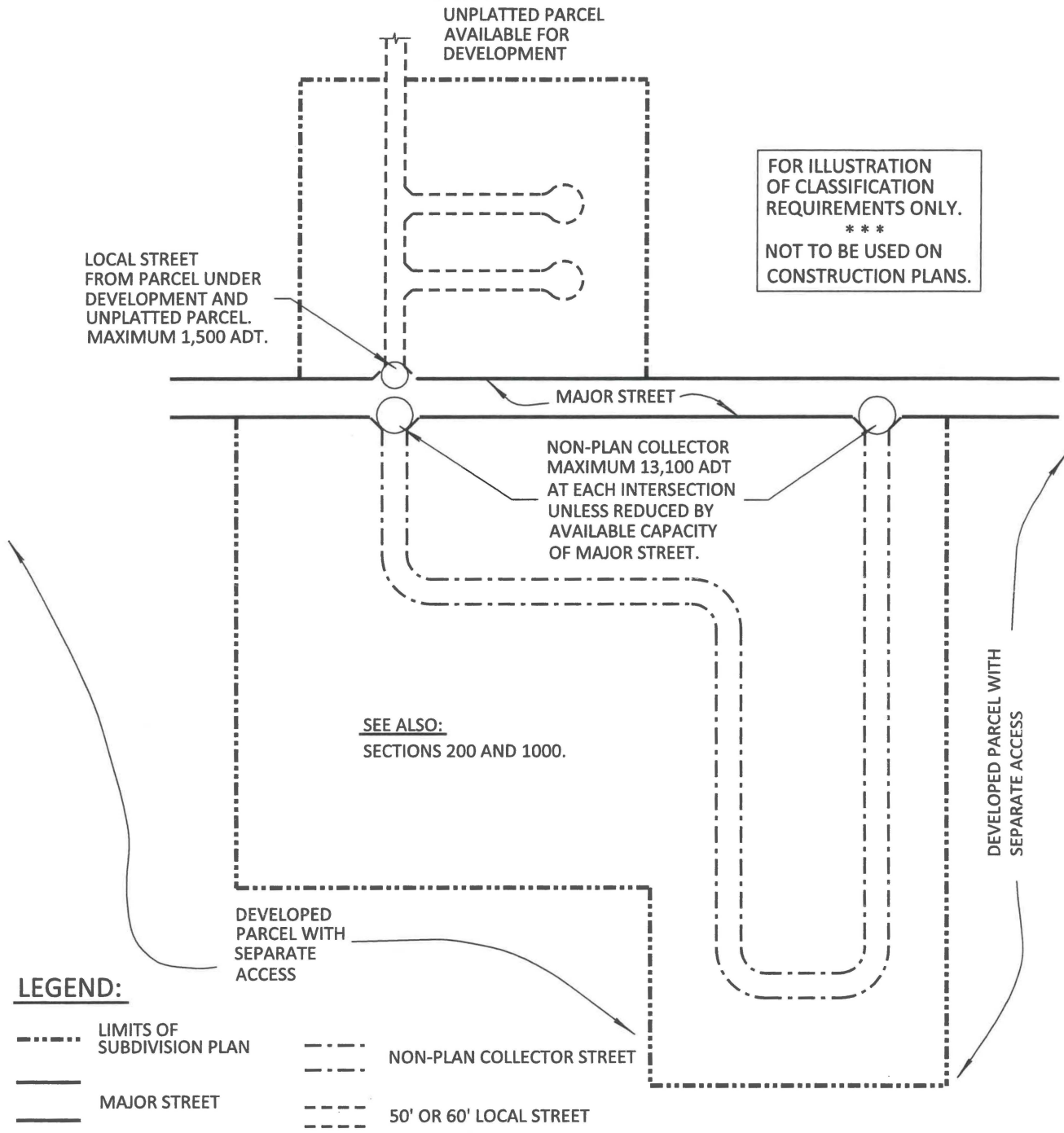
3. Revisions

The initials of the drafter and the date the detail was drawn further identify the drawing. From time to time it may be necessary to amend a detail drawing. The final amendment date and the initials of the drafter will appear in the title block. The final amendment date is the date the drawing was accepted by staff as a final revision ready for approval by the County Engineer. Until an amendment is signed by the County Engineer, the last approved detail remains in effect. See Effective Date below.

4. Effective Date

Signature by the County Engineer, or his/her designee, enacts the drawing.

**HIERARCHY OF MINOR STREETS
CLASSIFICATION EXAMPLE OF CONNECTIONS TO MAJOR STREETS
(DEVELOPMENT ENTRANCES)**

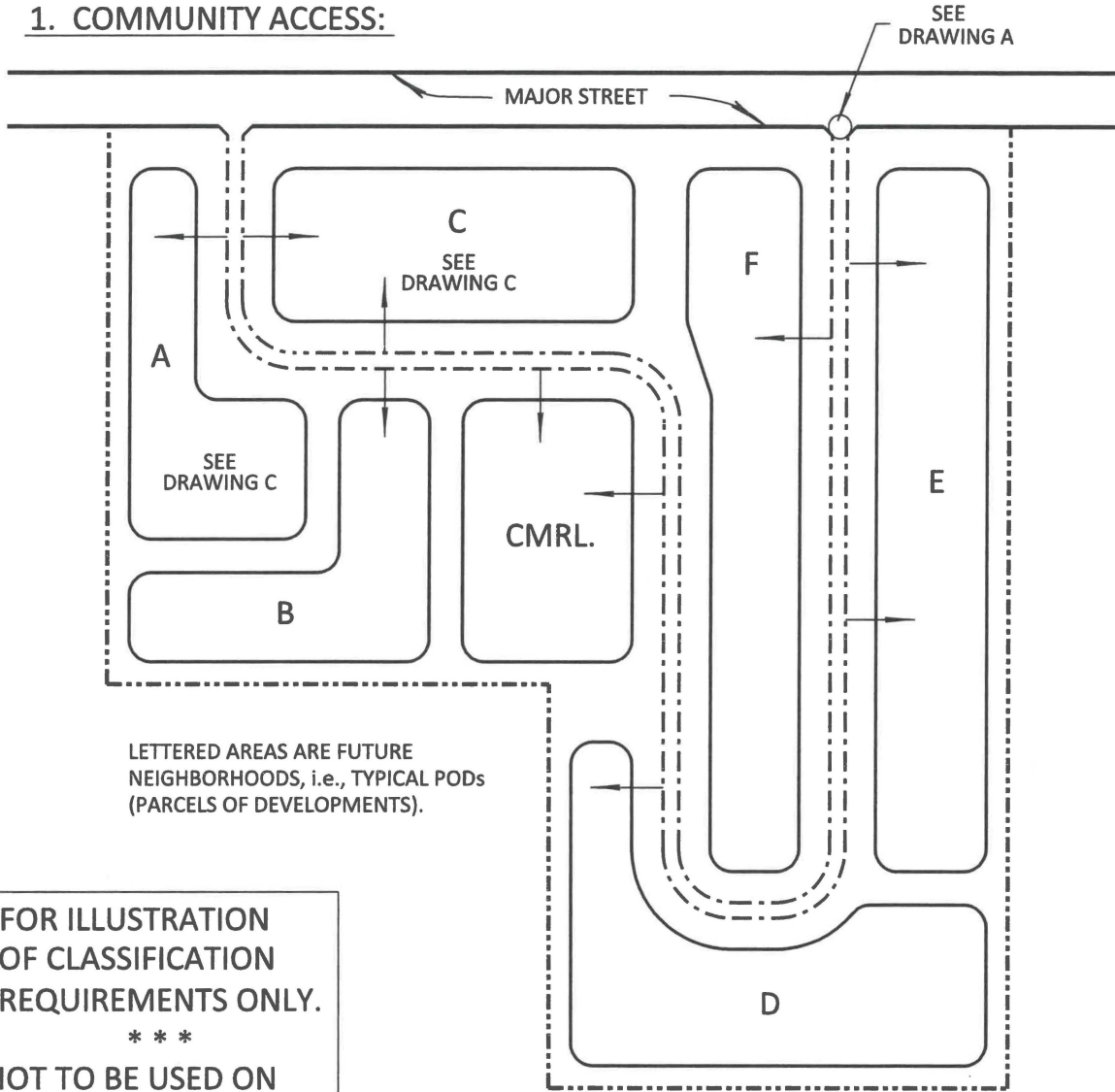


FILEPATH: P:/DGN/ENG SER/LAND DEVELOPMENT STANDARDS/DWF FORMAT/Drawing A

PALM BEACH COUNTY DEPARTMENT OF ENGINEERING & PUBLIC WORKS				HIERARCHY OF MINOR STREETS		DRAWING NO. A

[WHEN ALL PROPOSED STREETS ARE NOT SHOWN ON A PRELIMINARY DEVELOPMENT PLAN, A 2-PHASE CLASSIFICATION PROCESS IS REQUIRED AS FOLLOWS: (1) CLASSIFICATION OF COMMUNITY ACCESS AT PRELIMINARY DEVELOPMENT PLAN APPROVAL; AND (2) CLASSIFICATION OF NEIGHBORHOOD ACCESS AT FINAL SUBDIVISION PLAN REVIEW APPROVAL FOR EACH POD.]

1. COMMUNITY ACCESS:



LETTERED AREAS ARE FUTURE NEIGHBORHOODS, i.e., TYPICAL PODs (PARCELS OF DEVELOPMENTS).

FOR ILLUSTRATION OF CLASSIFICATION REQUIREMENTS ONLY.
 * * *
 NOT TO BE USED ON CONSTRUCTION PLANS.

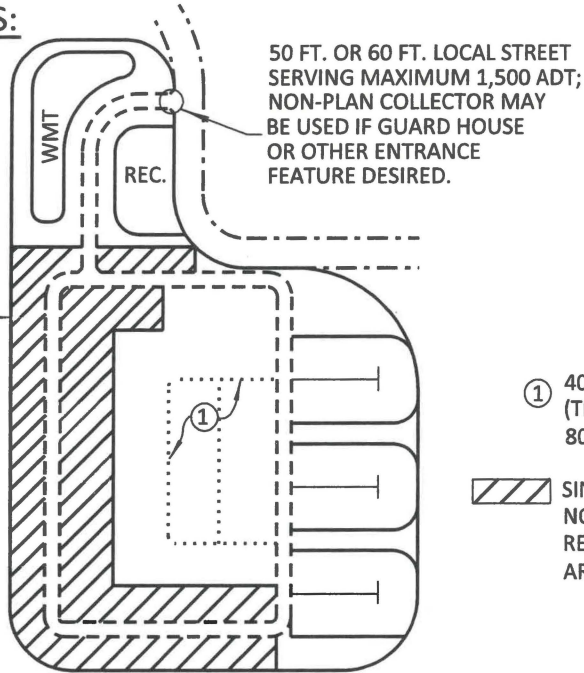
LEGEND:

- LIMITS OF SUBDIVISION PLAN
- ===== MAJOR STREET
- APPROXIMATE ACCESS LOCATION FOR POD
- - - - - NON-PLAN COLLECTOR STREET

FILEPATH: P:/DGN/ENG SER/LAND DEVELOPMENT STANDARDS/DWF FORMAT/Drawing B

PALM BEACH COUNTY DEPARTMENT OF ENGINEERING & PUBLIC WORKS				CLASSIFICATION EXAMPLE FOR STREETS IN PLANNED DEVELOPMENT SUBDIVISIONS		DRAWING B
DRAWN BY:	DATE:	REVISED BY:	DATE:	APPROVED:	EFFECTIVE:	
K.L.	05/23/90	J.M.K.	02/01/2018	<i>H. McConnell</i> COUNTY ENGINEER OR DESIGNEE	2/19/18	

NEIGHBORHOOD ACCESS:



FOR ILLUSTRATION OF CLASSIFICATION REQUIREMENTS ONLY.

 NOT TO BE USED ON CONSTRUCTION PLANS.

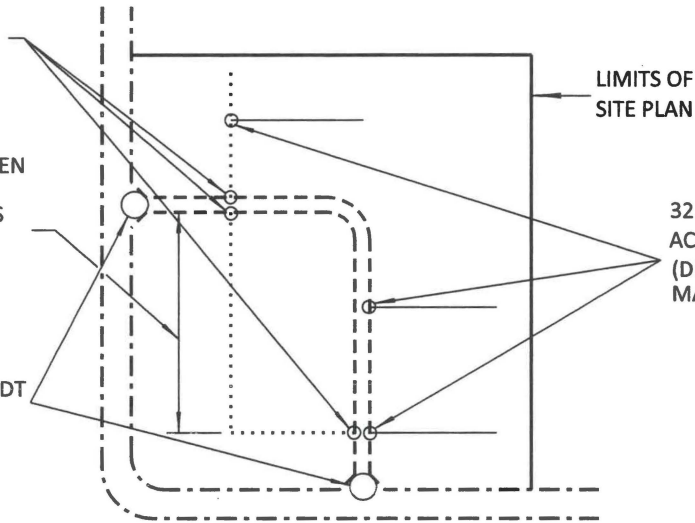
- ① 40 FT. RESIDENTIAL ACCESS STREET (THROUGH) SERVING MAXIMUM 800 ADT.
- SINGLE FAMILY DETACHED NON-CLUSTERED LOTS; REMAINDER OF POD LOTS ARE CLUSTERED.

POD/NEIGHBORHOOD (ALL CLUSTERED LOTS):

40 FT. RESIDENTIAL ACCESS STREET SERVING MAXIMUM 800 ADT AT EACH INTERSECTION

MAXIMUM DISTANCE BETWEEN INTERSECTIONS OR BLOCK LENGTH IS 1,320 FEET UNLESS APPROVED BY COUNTY ENGINEER PURSUANT TO ULDC ARTICLE 11.E.9-A.

LOCAL STREET SERVING MAXIMUM 1,500 ADT AT EACH INTERSECTION.



LEGEND:

- NON-PLAN COLLECTOR STREET
- 40' RESIDENTIAL ACCESS STREET
- 50' OR 60' LOCAL STREET
- 32' RESIDENTIAL ACCESS STREET

FILEPATH: P:/DGN/ENG SER/LAND DEVELOPMENT STANDARDS/DWF FORMAT/Drawing C

PALM BEACH COUNTY DEPARTMENT OF ENGINEERING & PUBLIC WORKS				CLASSIFICATION EXAMPLE FOR STREETS IN PLANNED DEVELOPMENT SUBDIVISIONS		DRAWING C
DRAWN BY:	DATE:	REVISED BY:	DATE:	APPROVED:	EFFECTIVE:	
K.L.	05/23/90	J.M.K.	02/01/2018	COUNTY ENGINEER OR DESIGNEE	2/19/18	

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THE DRAWINGS CONTACTED IN THIS MANUAL ARE INTENDED TO ILLUSTRATE ACCEPTABLE TYPICAL DESIGN OF THE REQUIRED IMPROVEMENT. THE DRAWINGS ARE NOT INTENDED TO BE USED DIRECTLY AS DETAILS FOR CONSTRUCTION PLANS.

EACH DRAWING MUST BE MODIFIED TO CONTAIN COMPLETE CONSTRUCTION DETAIL AND NOTATIONS IN ORDER TO BE USED ON CONSTRUCTION PLAN SUBMITTALS.