Arlington County Board Worksession

August 19, 2008

Civic Architecture and Wakefield High School

Overview:

The enclosed material is in preparation for the worksession to discuss Civic Architecture and the current project to replace Wakefield High School. Included is a working draft set of guidelines with images demonstration some of the concepts. In addition, a presentation County staff made to the PFRC to introduce the topic of civic architecture is included.

ARLINGTON
VIRGINIA

Guidelines for Civic Architecture

OVERVIEW

Good design is not a question of taste and style. It can happen in many styles and appeal to some tastes and not to others. We can judge whether or not a design is good by testing whether it is functional, whether it is durable, and whether it is visually attractive. This doesn't exclude innovation. The principles we apply to judge good design allow for changes in technology and taste.

Character, continuity and enclosure, quality of the public realm, ease of movement, legibility, adaptability and diversity are features of well-designed buildings and places, all of which have been shown to improve design quality and quality of life, whatever style is used by designers. Today we would undoubtedly add environmental sustainability and inclusiveness to that list.

These guidelines are intended to inform the design of civic facilities in Arlington, including buildings and other public projects, and to supplement existing County planning documents and policies. They are meant to provide enough guidance to ensure compliance with certain basic principles, but not be so specific as to inhibit creative design.

These guidelines apply to all civic architecture, but each project needs to be reviewed individually. Likewise, for each project certain guidelines may be stressed over others. The Use Permit process recognizes the individual nature of civic buildings. While the zoning ordinance provides a basic framework for allowable buildings, the Use Permit process is intended to clarify and provide more detail on a case by case basis.

Finally, all buildings owned by either the County Board or School Board are considered civic facilities. The scarcity of undeveloped land coupled with the high cost of available land means that each site must do its part to serve the broader community as a whole. Each facility must strive to meet more than the needs of a single group, but instead be a true community facility.

Sections:

1. **Civic Values**
2. **Orientation**
3. **Massing**
4. **Architecture**
5. **Transportation**
6. **Landscape**
7. **Lost Opportunities**

Civic Values

- Every project should demonstrate how it responds to neighborhood and community context and historic structures with appropriate massing, design, and materials.
- Emphasize leadership in energy efficiency and conservation as well as environmental sustainability through architectural design, materials, and construction methods.

School of Art, Design and Media at Nanyang Technological University in Singapore

- Ensure well-designed, barrier-free accessibility for all citizens by utilizing universal design standards.
- Explore adaptive reuse of existing structures and building elements and consider possible future reuse of new buildings.

Westover-Reed Adaptive Reuse

- Maximize the use of the land for building, outdoor uses and joint use of open space for recreation and minimize space used for on-site roads/service drives, parking and other transportation uses.
- Improve deficiencies to make neighborhoods more functional

Orientation

- Face the main public street with the primary entrance oriented to that street or public space, so that movement to buildings and their entrance is natural and intuitive.

W-L Entrance

- Emphasize mass transit, bicycles, and pedestrians over automobiles in building placement, entrance, and architecture.
- Define a relationship between buildings and open spaces by creating “positive” outdoor spaces with a pedestrian emphasis.

Harvard Yard, Cambridge MA

- Ensure the site design is sensitive to nearby natural and man-made features.
- Ensure that the building is functionally friendly and spatially coherent, allowing us to get from here to there without unnecessary obstacles, while leaving room for beguiling surprises.
- Ensure that the building is welcoming to pedestrians and accessible to people of all ages and physical abilities.

Massing

- Develop a sense of hierarchy in the architecture to define the main building entrance through its massing and architectural elements.
- Allow the building to express its function.
- Establish a simple overall massing and hierarchy that expresses a sense of the whole.

Traditional school massing with greenspace as buffer to street

- A project should be well proportioned, the windows and doors and other details neither too large nor too small in relation to the mass of the façade. It should be full-bodied, with a seamless flow between exterior and interior.

Example of poor design

Architecture

- Use design details within the whole to provide interest, discovery, and character.

- Celebrate the civic nature of the project with public art and architectural elements that have iconic presence.
- Use durable and permanent materials to assure longevity of the project and to express civic pride in the facility.
- Explore consistent design elements with other successful Arlington civic projects.
- Incorporate building lobbies larger than needed for circulation in order to create a sense of place and importance.
- Make the ground floor shine. Nothing counts like first impressions, and if a building meets the sidewalk or ground with a spacious urbanity, people are bound to be impressed. There should be generous heights and lots of glass. It makes all the difference on the street to have a tall, elegantly proportioned ground floor.
- While building materials are important, we can't always build the buildings like we used to for a number of reasons: building codes are different, materials like thick granite and kiln fired brick cost exponentially more than they once did. Moreover, wages are high and regulatory checklists can be long.
- Instead of starting with elaborate designs and lavish materials and then value engineering them down each step of the way, understand the constraints and turn them into virtues. For example, an architectural approach that sticks to clean lines and simple setbacks can come alive with the use of handsome tiles at the pedestrian level, or nicely proportioned and detailed windows above.

Middle School, Raleigh, NC

Sidwell Friends School, Washington, D.C. renovation and expansion of 50 year old middle school to model environmental responsibility. First secondary school to earn US Green Bldg Council's Platinum rating

Transportation

- Provide and promote affordable, convenient, and integrated transportation choices.
- Promote transportation alternatives to cars:
    - Provide pedestrian circulation through and around the site and connect to existing sidewalks and trails.
    - Provide ample and highly visible bike parking.
    - Incorporate bus stops into the site with significant prominence.
    - Minimize surface parking and impermeable surfaces.
- Minimize curb cuts and consolidate loading functions.
- Minimize vehicular and pedestrian conflicts, and adverse transportation impacts
- Provide accommodations (i. e. parking, access, right-of-way) for all modes of transportation.
- Construct and manage streets to be "Complete Streets" streets should be safe and comfortable for pedestrians, bicyclists, transit riders motorists, and other users.
- Allocate transit resources to emphasize fast, frequent, and reliable service on the Primary Transit Network, and increase neighborhood access with the feeder and connector service of the Secondary Transit Network.
- Incorporate visible, safe and convenient universal access from adjacent streets and sidewalks to the facility
- Encourage connectivity with adjacent neighborhoods, public facilities and similar uses
- Design access locations to enhance circulation
- Integrate traffic mitigation measures to minimize conflicts in surrounding community and to encourage posted speed limits
- Use Transportation Demand Management (TDM) and Transportation System Management (TSM) measures to mitigate expected increases in travel demand and to maintain traffic operation efficiency.

Example of car-oriented design

Landscape

- In every outdoor area, create a sense of place that can be experienced by users.
- Projects should be sensitive to its site, acknowledging natural and man-made features nearby without either trying to upstage or to obliterate them. A project should know when to step forward boldly and when to recede politely into the background.
- Preservation of mature landscaping and trees on the site.

Lost Opportunities

- If you go to a concert and the performers are having an off night, the damage is transitory. Same thing with a bad meal in a restaurant, a poorly performed sporting event, bad movie, etc. There will always be another game, another concert, another movie. A bad building, however, can stink for decades, fouling it surroundings and lowering the bar for everything that comes after. A well designed building can stir the soul and challenge others to aim higher.
- In a survey of studies from around the world, Britain's Commission for Architecture and the Built Environment found that well-designed buildings and urban spaces have tangible value across the spectrum: higher housing values, expanded tax revenues, higher rents for businesses, happier and more productive office workers, more tourism, reduced maintenance costs, lower crime rates, shorter hospital stays and improved pupil performance and behavior.
- Buildings should be authentically of its own time and place, not a rip-off of history or a cookie-cutter replica of Anywhere, U.S.A.
- Early coordination can provide solutions for multiple long-term problems; different user groups may not be aware of each other's needs and uncoordinated designs can block future solutions.
- Coordination of joint use facilities will enable maximum use of land and other community interests.

EXAMPLES OF OTHER SCHOOLS

Newton HS, Newton, Mass

A suburb of Boston, this school costs almost $200 million which includes a 405,000 s.f. facility designed by architect Graham Gund and is scheduled to open in 2010. Project included a number of delays, went through extensive public review and continuous debate including a number of citizen local architects that submitted their own plans and said that they could design the school for $100 million. An alderman who requested anonymity because of the sensitivity of the project stated: *"But we can't have people running up to City Hall and putting plans in front of us. This is no disrespect to them – we have a very talented, very educated, very knowledgeable population in the city of Newton – but we're working with professionals, and because other people don't like it doesn't mean it's not right."*

Roybal Learning Center, Los Angeles, CA.
This is the nation's most expensive high school. The more than $400 million school sits atop an oil field just west of downtown Los Angeles. It became notorious not only as an allegedly toxic site but as the nation's most expensive high school construction project. The furor over it drove out incumbent school board members, a superintendent and a regiment of career administrators. It also led to the rewriting of state law and local policy regarding environmental issues at school sites. The school became a symbol of a dysfunctional school district. The project was delayed, canceled, partially demolished and redesigned over 15 years. A gas-mitigation system costs more then $17 million to design and install and will cost $250-500K a year to operate.

Specially designed light stanchions which ventilate methane gas. The school buildings are protected by a plastic liner below the concrete slab. Below the liner are tubes to collect gas and carry it outside. Sensors that detect gas trigger blowers to force it out more quickly. This requires lifetime monitoring and maintenance of the school building.

The 2,500 student capacity school includes a dance studio with a cushioned maple floor the size of a small gym, a triple gym with seating for 3,000. There are 480 underground parking spaces and numerous site landscaping features.

TC Williams HS, Alexandria, VA.

Completed in 2007, the 461,000 SF school had a budget of $90.4 million, was LEED certified and is designed for 2,500 students.

PUBLIC FACILITIES REVIEW COMMITTEE

ARLINGTON
VIRGINIA

Planning Background and Review Guidelines

January 30, 2008

Presentation Outline:

- PFRC Mission
- Public facilities in Arlington
- Land use planning in Arlington
- Documents that guide planning in Arlington
- Community Concerns
- Urban Design Considerations
- Resources and Handouts

Public Facilities

- Public facilities date mostly to the early 1900s and later
- Most public facilities built since WWII
  - Need updating and replacing
- Most facilities in residential areas
- Focus has not been on civic architecture.

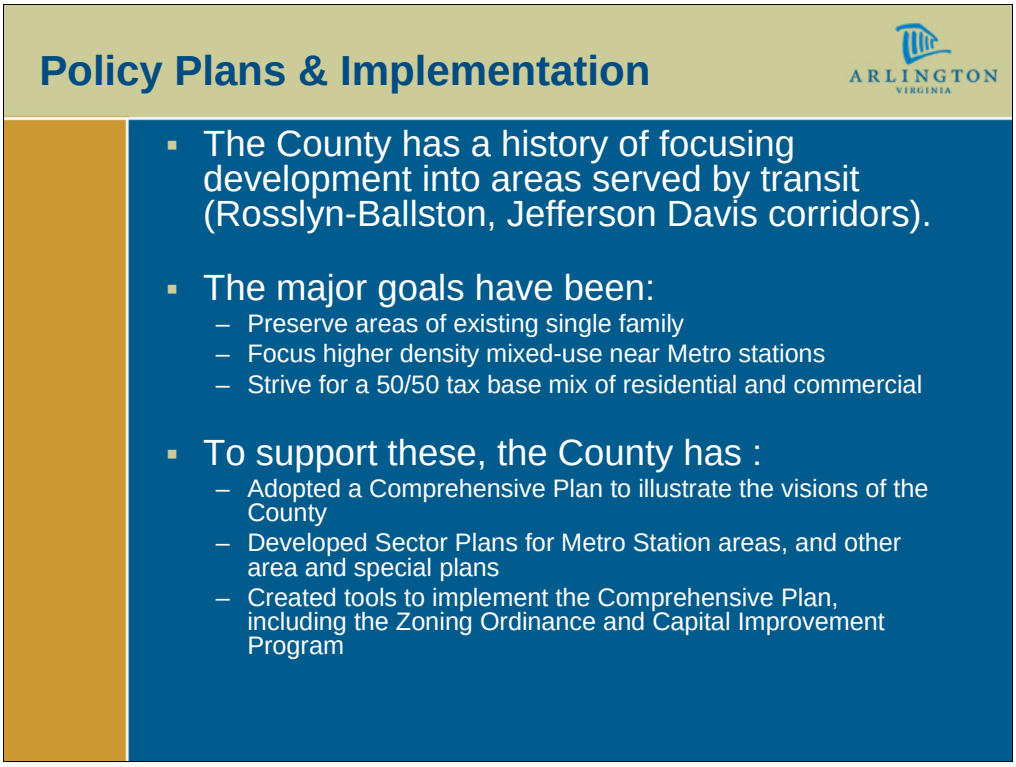
- Most public facilities are located outside Metro corridors. Most of the public review experience with development is with commercial/mixed used/mid-to-high rise development in the Corridors.
- Public facilities (schools) are generally located in "Low" residential area (1-10 units/acre)
- Single-family detached – constructed 1940s – 1950s.
- With population expansion after WWII, many new churches, public libraries, recreation centers and schools opened. More than 20 new schools were constructed during the 1950s/1960s.
- Three (3) County High Schools:
  - Washington & Lee constructed 1925 – renovated/expanded 2007-08
  - Wakefield constructed 1953
  - Yorktown constructed 1960, renovated 1994, approved use permit 2007.
- The focus has not been on civic architecture with development of public facilities – although there have been some projects with "civic" components: Shirlignton Village Library/Signature Theatre, public observation deck Rosslyn Central Place.

PFRC MISSION

- Incorporate the following into civic projects:
  - Land Use Planning
  - Transportation Planning
  - Community Concerns
  - Urban Design

- Ensure that the highest quality of land use planning, design, transportation planning, and other important community aspects are incorporated into civic projects.

- The PFRC could ultimately review a large range of projects, with widely varying needs, and in different types of areas. Many of these facilities will include multiple uses. These projects need to be reviewed in the context of several sets of criteria, including facility and agency needs; public, community, and user needs; and planning policies, principles, and implementation tools.



- The County Board's vision for the future of Arlington has remained relatively constant since the early 1970s, with a focus on high density development in the two metro corridors and leaving the balance of the County/community alone. Leaving alone doesn't mean ignoring, however.
- This vision is driven by Arlington's interest in directing growth to a small area of the County to improve our economic environment and to promote efficient use of the transportation system, while preserving the majority of the County's low scale residential neighborhoods.
- The County has adopted policies, and tools to implement the policies, to ensure that the vision is realized over time. Major policies include the Comprehensive Plan to cover the entire County and sector and other special plans to provide more detailed guidance for the future. Tools to implement the County vision include:
    - Zoning Ordinance and Map (defines legal rights and constraints regarding use and building on property).
    - Capital Improvement Program (used to schedule and prioritize capital projects).

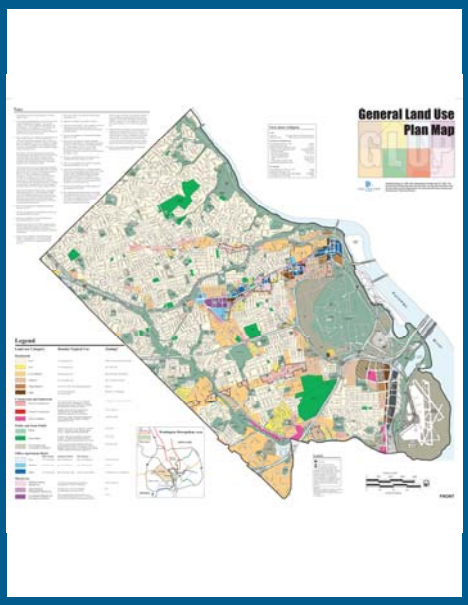
Policy and Legal Documents

- Arlington County's Comprehensive Plan has 9 Elements:

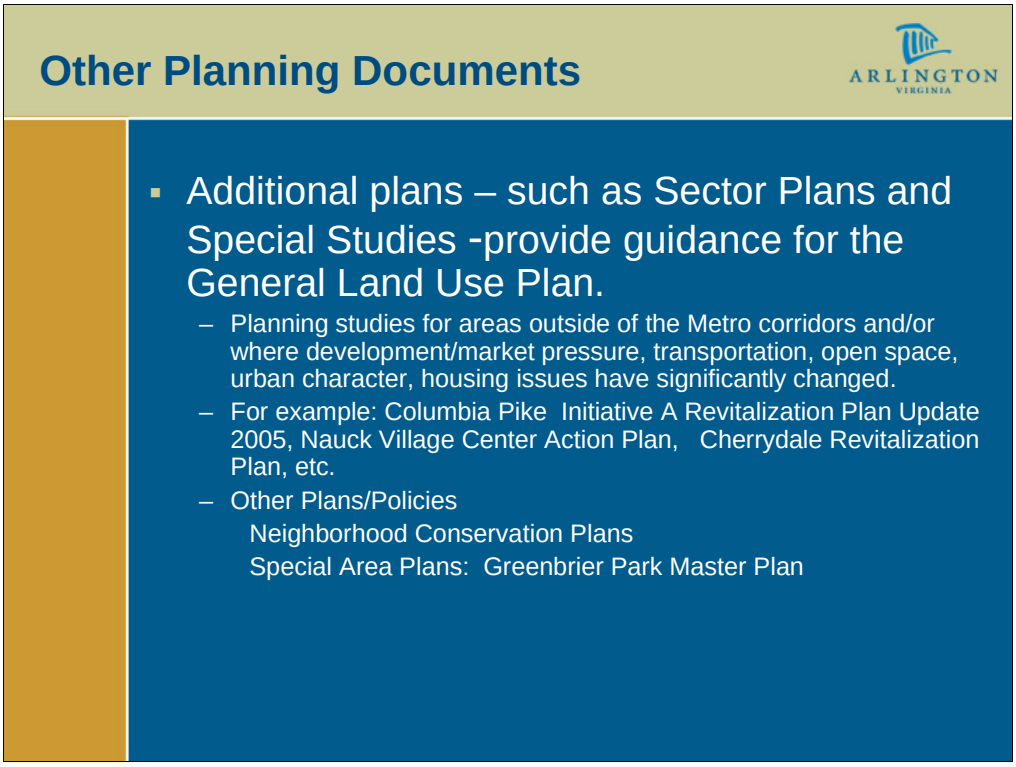
1. General Land Use Plan
2. Master Transportation Plan
3. Storm Sewer Plan
4. Water Distribution System Master Plan
5. Sanitary Sewer System Master Plan
6. Recycling Program Implementation Plan
7. Open Space Master Plan
8. Chesapeake Bay Preservation Ordinance and Map
9. Historic Preservation Master Plan

- The County's Comprehensive Plan is the set of overarching guiding policies for the County, made up of the nine elements listed here.
- The General Land Use Plan, or GLUP, is a document and map, general in nature, that indicates the County Board's vision for Arlington's future land uses and intensities of uses.
- The Master Transportation Plan complements the GLUP and shows how Arlington plans to move people in, out, through, and around the County in a way that's consistent with planned land uses.
- The other elements similarly complement the GLUP and speak to infrastructure needs, environmental concerns, and resource protection.

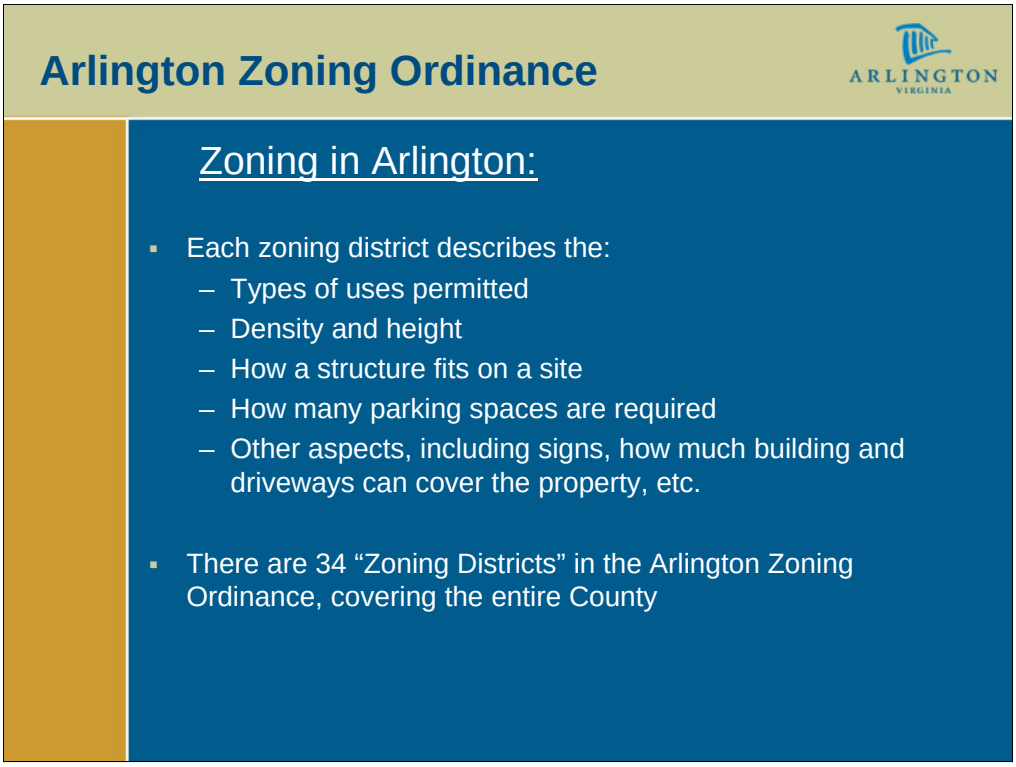
General Land Use Plan Map



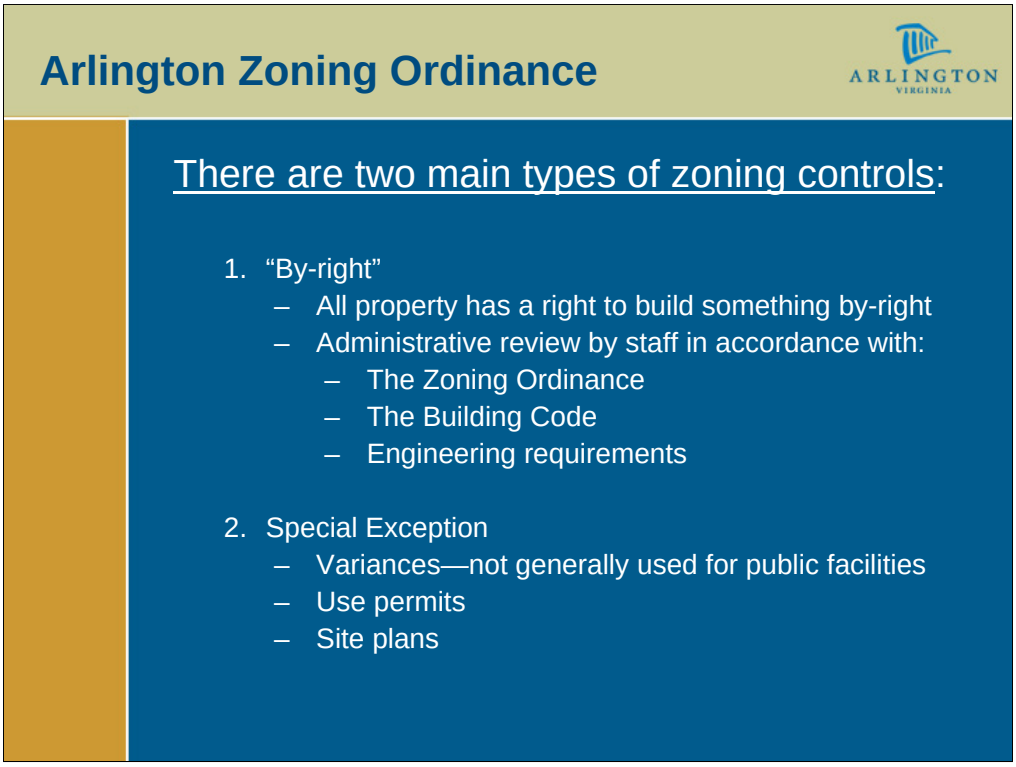
- This is one side of the GLUP map, which shows the planned land uses and intensities of use throughout the County. Yellows and browns show residential uses, green shows public and park uses, and pinks, blues, reds, and purples show commercial or mixed uses. The darker the color, the more intense the planned use. Note how dark colors are restricted to small portions of the County, pretty much exclusively along our two metro corridors. As you know, public facilities, most of which are in green areas, are scattered throughout the County. We have copies of the GLUP to hand out.



- Most of the major land use planning in Arlington was completed many years ago and set the County Board's vision for the County. These included sector plans for most of our metro station areas, to concentrate development density in the urban corridors linked to transit, and to evaluate aging commercial corridors and develop strategic plans to maintain their viability and diversity
- Sector Plans are area plans for defined areas around each Metro station. (Ex.: Rosslyn, Courthouse, Clarendon, Virginia Square, and Ballston). They include more detailed guidance for planning & development, and recommend specific mixes of uses, infrastructure issues, roads, and transitions to adjacent neighborhoods. Sector plans also develop zoning tools and provide urban design guidelines. They are developed with community input and adopted by the County Board.
- Today, planning processes are typically undertaken to fine-tune previously approved plans or to study and make recommendations regarding areas that need to be revitalized or for which there is growing or anticipated development pressure.
- All of the various planning documents have helped the County Board provide consistent land use policy, enhanced the County's ability to control growth, encourage good development with community benefits, and limit not-so favorable development.

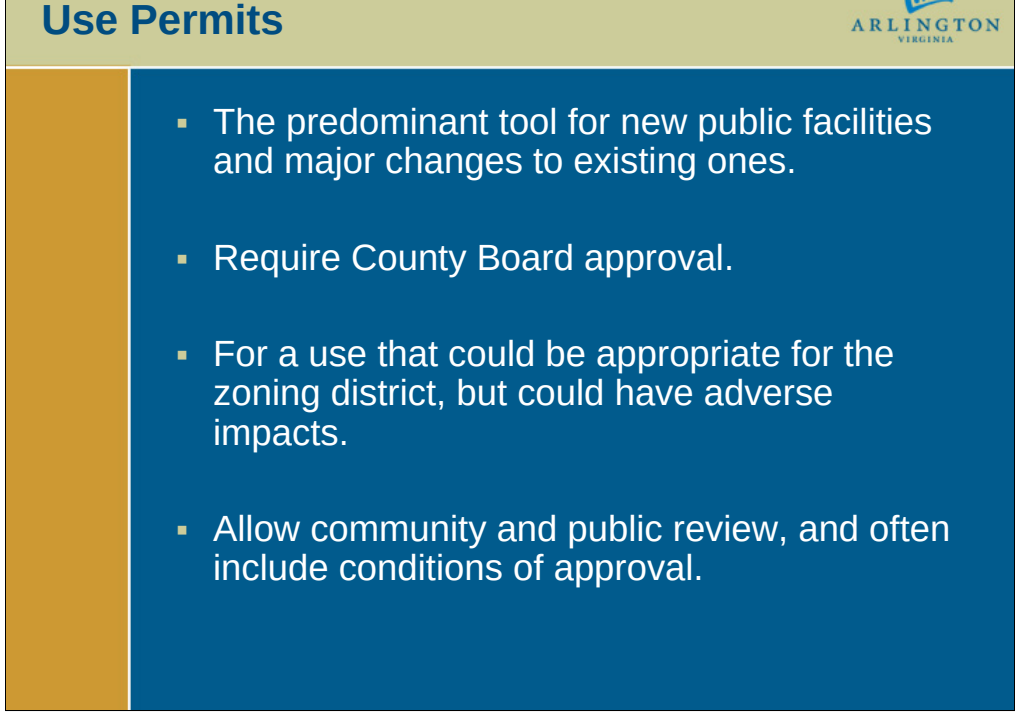


- While the General Land Use Plan and other area plans set policy, the County needs a legal way to realize these plans. The major tool to implement our land use policy plans is the Zoning Ordinance.
- Zoning: Indicates what specific uses are allowed on a property as well as additional regulations (height, density, parking distance from property lines, etc). Zoning is legally binding.
- Every property in the County falls into one zoning district. A zoning map is available in the Zoning Office or can be found on the County's website.



- Zoning applies to property in two ways. In all zoning districts, there are specific rules for using and developing property. Anyone who follows these rules can obtain a permit to build what's allowed in that district. This is called "by-right" development.
- If a particular use or amount of development could be appropriate in a district, but could have adverse impacts, such as increased use, traffic, noise, building bulk, or the like, in some cases the County permits that use only by special approval. These special exceptions often include modifications or aspects of the development that mitigate the impacts, and they also often include special conditions of approval.
- The types of special exceptions are variances, which are not generally used for public facilities, so won't be described here, Use Permits, and Site Plans.

Use Permits

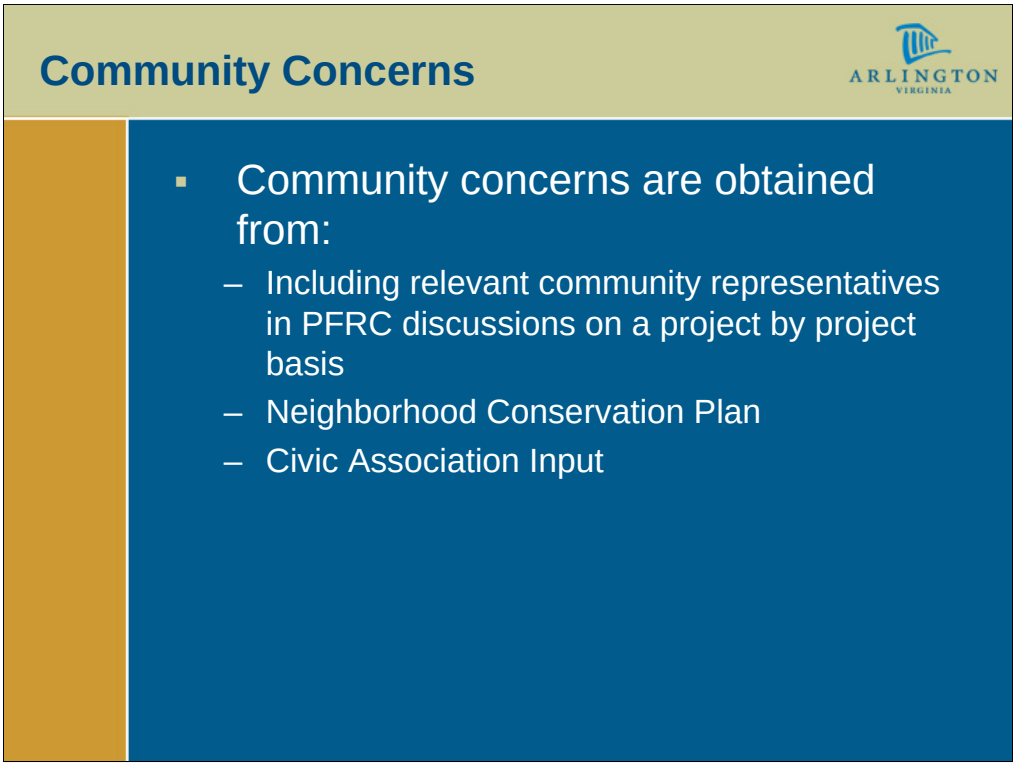


- Use permits require County Board approval.
- Most public facility projects will go through the use permit process, which involves public and staff review, and will incorporate types of conditions typically applied to a wide variety of use permits (with new construction), including requirements for new or widened sidewalks, landscaping, vehicular circulation, and special provisions for the community to get information or make complaints regarding violations of conditions.
- Arlington Public Schools and Arlington County have developed joint development principles:
  - Public buildings should be built to endure, even if sometimes it means a higher initial expense.
  - Urban design must balance the needs of the immediate neighbors and the broader community.
  - Role of the facility in creating a community presence and establishing a public place.
- Design considerations will also be part of the use permit review process.

Site Plans

- The major tool for managing and controlling significant development.
- Requires County Board approval.
- Often permits substantial increased building size and intensity of use in exchange for extensive public review.
- Could be used for public facilities, generally as part of a larger development.

- Site Plan special exceptions also require County Board approval and an extensive public review process. Site Plans are more generally used in the metro corridors and major commercial centers and permit substantially increased building size and intensity of use. This process is similar to, but more extensive than, the use permit process, and could be used for review of public facilities that are part of a larger development project. For instance, the Shirlington Library was approved as part of a large site plan in Shirlington.



- The PFRC will also incorporate community concerns into their project reviews. These can come from established documents such as neighborhood Conservation Plans as well as from community input at meetings or otherwise solicited during project review.

- Urban design is a critical part of public facility development. Good urban design establishes a place that people want to visit and use, enhances the environment of the neighborhood, makes it easy to find, identify, and use the facility, and makes a statement about how the County values itself and the neighborhood. Good urban design in Arlington is less driven by documents and more driven by current thinking and practice. Some goals are: urban village; new urbanism techniques; transit oriented development; Sustainability; Walkable Urbanism - more pedestrian friendly, less auto dominated/oriented.
- Some major elements of urban design for public facilities, and in fact for all development, include:
- Building placement and orientation: should relate to existing conditions around the site in terms of massing, access, and environmental concerns, reflect how the site is to be used, and emphasize the importance of visibility of the building and its entrances. Central urban design elements also include bringing buildings to the back of sidewalk and framing the street when appropriate, and emphasizing pedestrian access.
- Architecture includes building form, massing, height, and tapering. Contextualism - scale of the proposed development - how does it fit with the scale of the already established neighborhood? Relationship to adjacent uses. Is the existing context worth emulating???
- high quality building materials, façade treatments with windows, doors, articulation and other features to visually break up large walls. Activation of the street edge. Roof top treatment to screen mechanical equipment, and exterior lighting. Design driveways, parking, and loading and trash facilities to de-emphasize them as major site elements. Minimize visual, noise and other impacts of these uses as well as mechanical systems.
- Sustainable and Universal Design – Maximize environmental sustainability and access and usability for all users, both of buildings and grounds.
- Design pedestrian circulation to encourage walking to and through the site and to reflect common sense needs of the facility's users. Minimize conflicts between pedestrians and vehicular circulation. Consider open spaces, landscaping, active versus passive uses of open space and access for users.

- Transportation issues become important in facility planning.
- At a large scale, the street network and street design need to be consistent with the County's transportation policies and also meet the needs of the facility and the neighborhood it's in.
- The project should implement the County's goals to Expand Travel Choice, by making travel to and within the site attractive for pedestrians, bicyclists, and users of transit.
- Transportation Demand Management programs establish measures to reduce traffic and parking demand and could be incorporated into public facilities plans.
- Parking is always a contentious issue. The appropriate number of spaces to accommodate the uses of the facilities needs to be determined. This needs to balance County policies to reduce traffic and parking while meeting user and community needs for convenience, usability of the public facility, and potential neighborhood inconvenience due to spillover parking.
- As mentioned in the previous slide, actual design of the parking and access is important.
- Measures or restrictions to manage street parking may be necessary.

Images

- Poor example – window proportion/mechanical equipment screening. Looks more like a prison – read the sign!

Images

- Again, many blank walls, lack of windows, lack of landscaping – another poor example.

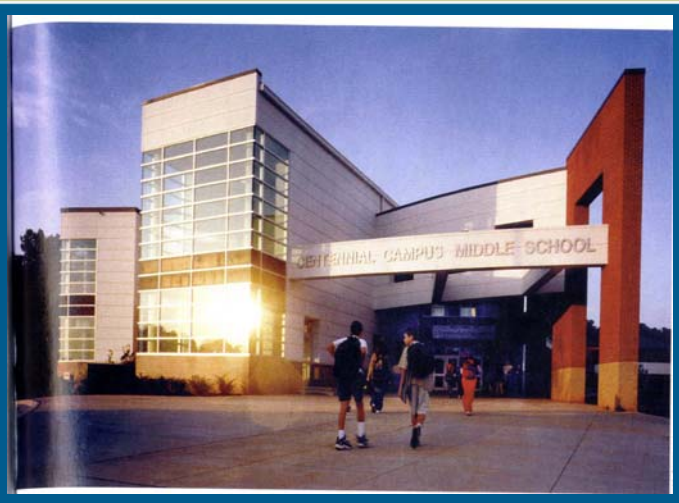
Images

- Good Entrance feature
  - Located at back of sidewalk – good public prescence
  - school located in Raliegh, NC

Images

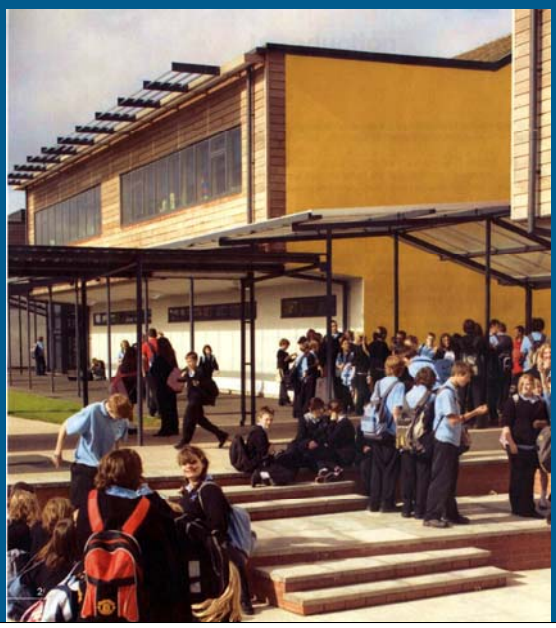
- Sidwell Friends School – Washington, D.C. – renovation and expansion of 50 year old middle school to model environmental responsibility.
- 1st secondary school to earn US Green Bldg Council's Platinum rating

Images



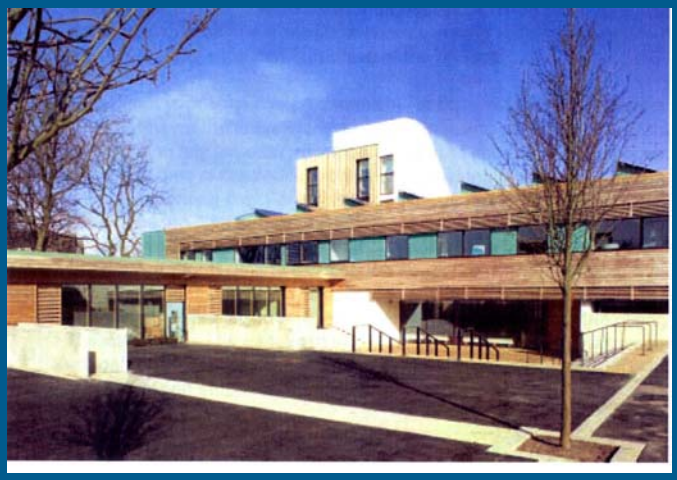
- Raliegh, NC
- Located within NC State

Images



- Whitecross HS – Hereforshire, GB

Images



- Academy of St. Francis of Assisi – Liverpool, GB

Images

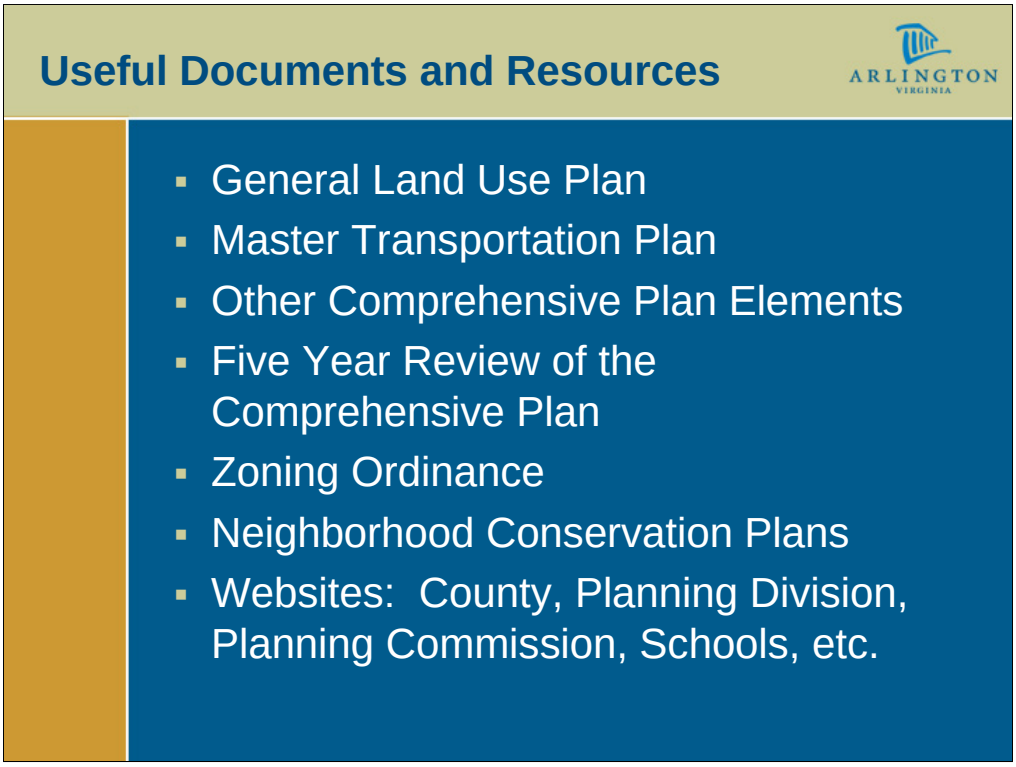
- Minneapolis
- Located above a city-owned underground parking garage.

Images

- San Jose, CA located with an urban historic district which is part of a larger urban design master plan that includes the new city hall and civic complex.

Images

- San Jose, CA – cafetorium flexible lunch room that doubles as an auditorium for school assemblies and other community gatherings, note the glass/windows – note the treatment of the walls to add windows!



- Here is a list of useful documents. We're going to distribute copies of the GLUP and also the Five Year Review of the Compehensive Plan, which briefly describes all of the Comprehensive Plan elements and major planning documents and who is responsible for them. Many of these documents are available on the County's website, and we are handing out and e-mailing a number of web addresses for your further perusal.