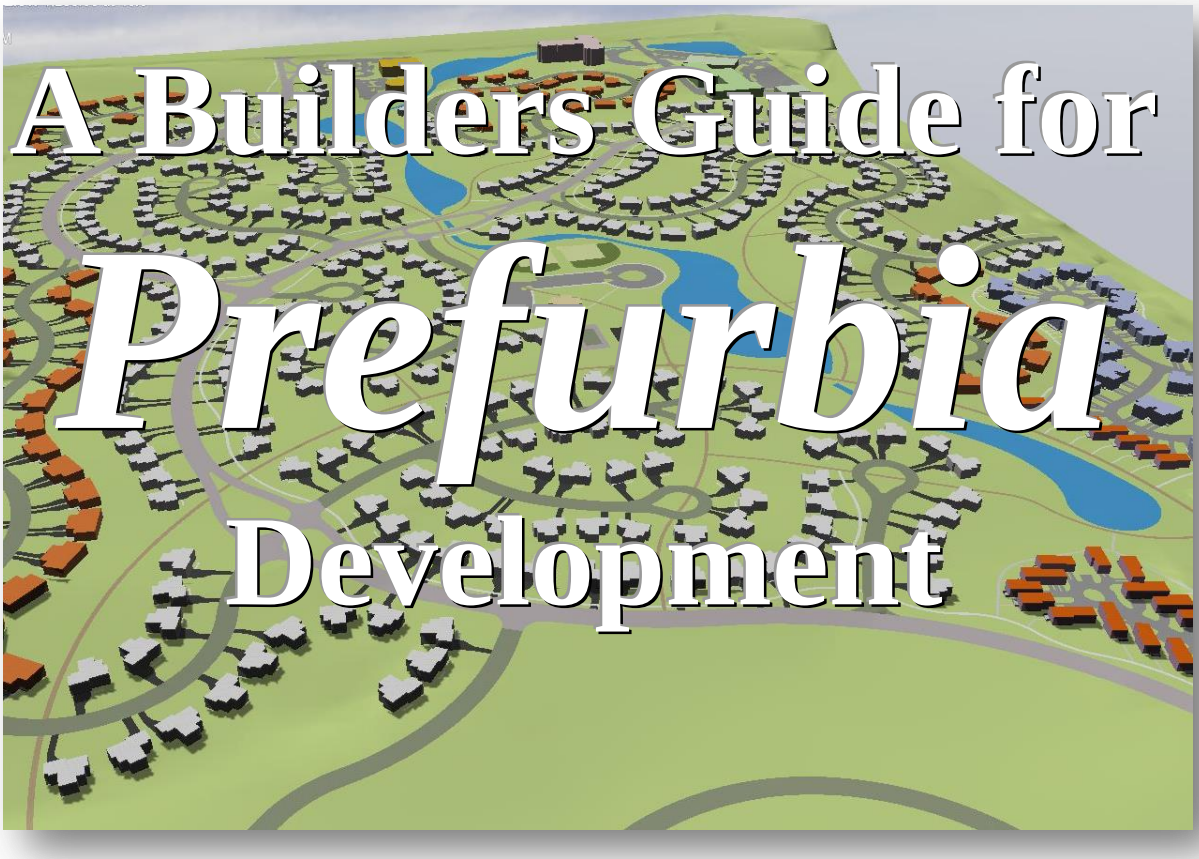
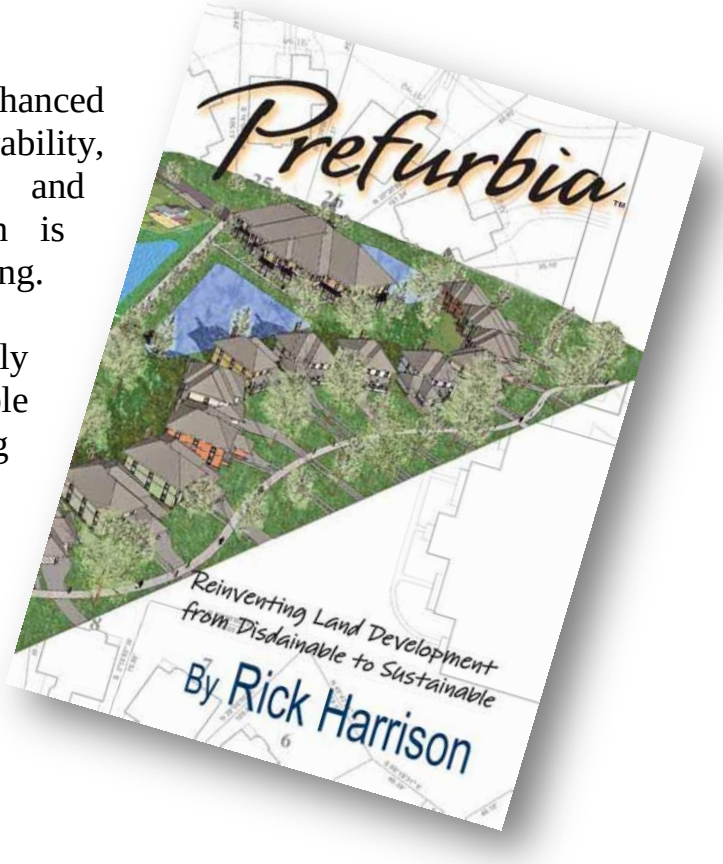


Introduction

Prefurbia Neighborhoods provide enhanced curb appeal, a higher standard for livability, reduced environmental impacts, and increased values; above that which is possible with standard subdivision platting.

When designed and constructed properly Prefurbia will have a considerable influence on the home buyer - choosing your neighborhood instead of the subdivision down the street.



Several implementation factors are key to the success of any Prefurbia development. Without these critical details, the benefits of these designs may be negated. Errors are most often due to surveyors, engineers, and/or builders not understanding the following critical design details.

We recommend that this document be used as a minimum – for a full understanding of Prefurbia, we recommend our comprehensive book: Prefurbia. This $49.95 book can be ordered through www.neighborhoodinnovations.com

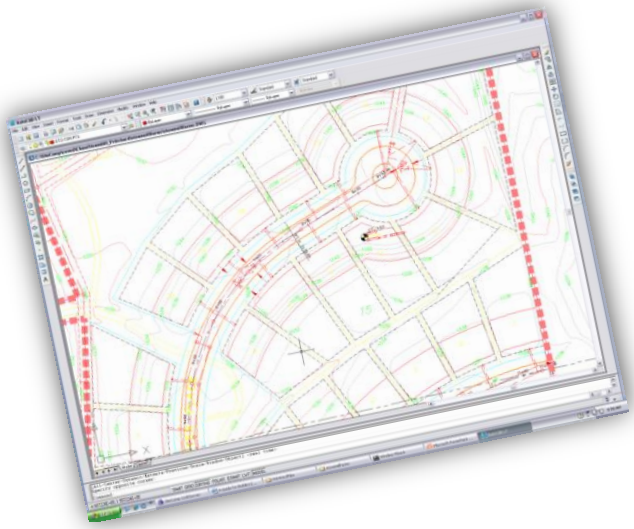
This guide will help you identify potential problems that can arise to make sure every Prefurbia neighborhood is built as intended, and costly mistakes avioded.

The design methods have been through an evolutionary path over a quarter century on 900 developments. Each development gets refined as we interview home owners living in the developments for their comments, our own design analysis, and any comments (good or bad) from developers and cities. Adjustments are then made to improve and perfect the methods. Thus, no other firm has the vast experience to provide advice to make your Prefurbia development successful.

To understand Prefurbia, you must first understand conventional design.

Conventional Platting

Conventional platting is easy… simply set the home parallel to the curb, which typically creates a landscape of garage doors that define the streetscape.



Conventional platting is about numbers - minimum setbacks, minimum square footage, minimum widths and depths…
…no 'character building traits' that create views of space or assure that property values are sustainable.

Nothing to define the neighborhood as unique because it is designed exactly like others in the region.

All conventional subdividing of property has been accomplished using civil engineering or land surveying CAD based software that automates lot and street generation using regulatory minimums and typical configurations. Design is reduced to squeezing as many building sites allowed by regulation and encouraging monotony.

Prefurbia harnessing technology that specifically developed to encourage great design instead of mindlessly automation in pursuit of speed to plat. Our design technology is more advanced than CAD systems used by architects and engineers.

Prefurbia: A Coved Streetscape

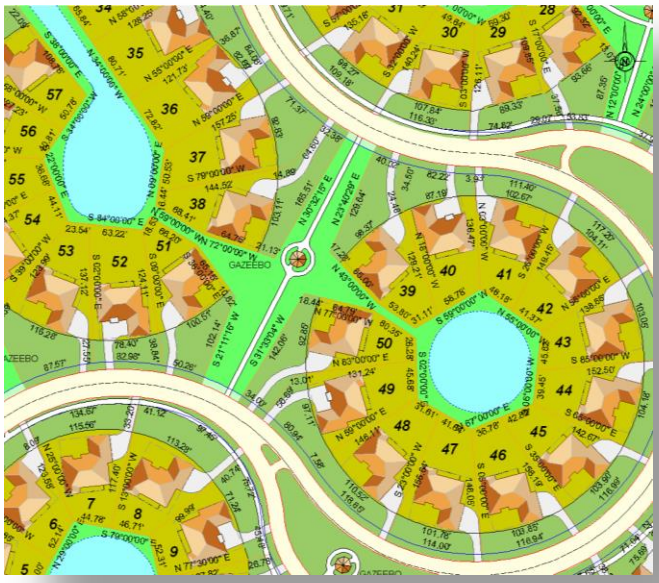
Definition of ‘coving’

A meandering graceful curved greenway formed by homes creating open space between façade of homes and street edge.

Coving breaks away from the strict relationship between home and street; thus **the position of the home front is not defined by the shape of the street**.

The ‘Coves’, or large open areas of greenway alternate along both sides of the street.

These spaces are *created by the setbacks of the homes*, each which form a smooth meandering ‘arc’ when they are built in the proper location.



Homes avoid 'staggering' - the front building setback defines both the home front and angle relationship.

A "Coved" Setback

Figure 2 – Wedgewood Coves, Albert Lea, Minnesota shown above

In **coved** neighborhoods, the homes form a curved pattern *separate* from the street (and not parallel) as shown here. **Each home front forms an individual component of a shape that is formed separate of the curvature of the street along the outside of the curve, and may also form a separate shape from the inside of the arc of the street**.

This coving effect **sculpts** the neighborhood living environment and sets the streetscape as the most exciting element of the neighborhood. The method also softens the visual impact of parked vehicles, and provides an open feeling that feels much less dense than conventionally planned neighborhoods (of similar densities). When homes are placed correctly, coving screens the (unsightly) rear yards from view while driving or walking along the streetscape forming a more inviting and less cluttered community.

Home Placement

The coved front setback line determines final house placement is *always* defined on the preliminary and final plats.

This is noted *by dimensions along each side lot line* and the *distance along the home front, which is along the meandering front building setback line*.

As such, the builder MUST set the home front exactly along the front setback to assure maximum value and maximum livability.

When no side setback line dimension is shown, the setback is **at the minimum allowed** by regulations and parallel to the street, typically along the inside of the curve of the street.

Scale:

On very tight sites (such as the one shown on page 6), there is very little room for meandering, thus the depth of setback is limited without sacrificing rear yard space. In most coved applications there is room for a significant meandering of the front yard.

View Corridors

Above is cul-de-sac which is the furthest point on the site from the edge of a lakeshore.

By sculpting the street using coving and flared setbacks, many of the homes in this cul-de-sac can see through the site to the lake! In fact most homes in this development have a lake view greatly enhancing the marketability and premium values. A mistake we typically see from concept plan to built development is that a surveyor or engineer along the way changes the setbacks and eradicates all the premiums that were provided by the initial design.

So why would someone change the setbacks? They simply do not want to be bothered with the added attention to detail, and as such would sacrifice both marketability and sustainable home values because of their laziness and disrespect for their clients success. In this photo to the right, the engineer changed the 'rate' of setback.

Rate of Coving

The actual ‘rate of coving’ is critical to create a sense of scale.

Unfortunately the Civil Engineer for Pheasant Run in Otsego, Minnesota (picture on the previous page) changed our initial plan where homes aggressively meandered “to and from” the curb line to less aggressive sweeps. This ruins the sense of scale resulting in homes with very long driveways and *reduced sense* of space.

Gradual & lengthy transitions from small setbacks to deeper setbacks should never be used in Coved design.

The above picture is of Eagle Pass in Centerville, Minnesota – the first “coved” development. The homes vary in setback from the minimum 30’ to a maximum of 70’. This is not enough to get an enhanced sense of ‘scale’. As a general rule, the setback should vary from the city minimum (in some cases even less) to 1.5 times the lot width.

Avoid Staggering

Coved neighborhoods typically do not have any staggering between home fronts. However, occasionally the setback may have *slightly staggered* setbacks. Typically these setback staggers are used only in areas that are extremely tight and would have resulted in a lot loss if not used. The problem with a staggered setback is the break-up of continuity along the streetscape as well as over-exposed side yards. Staggering also reduces the angle relationships and sacrifices longer viewsheds from within the homes.

Non-coved design in Prefurbia encourages structures to be staggered rather than aligned at the exact same setback. It is only 'coving' that discourages staggering of setbacks.

The Civil Engineering and Land Surveyor Responsibilities

It is the responsibility of the Civil Engineer and Surveyor to ensure that the initial planning of Rick Harrison Site Design setback controls are to be set as shown on the plan.

If there is a conflict due to unforeseen topography, wetlands, drainage or sewer considerations any and all design changes must be cleared through RHSD, Inc. to be sure the integrity of the neighborhood remains.

Developer's Responsibilities

It is the responsibility of the developer to be sure all builders realize the advantages of coving as well as the critical importance of home placement – share this document with your builders!

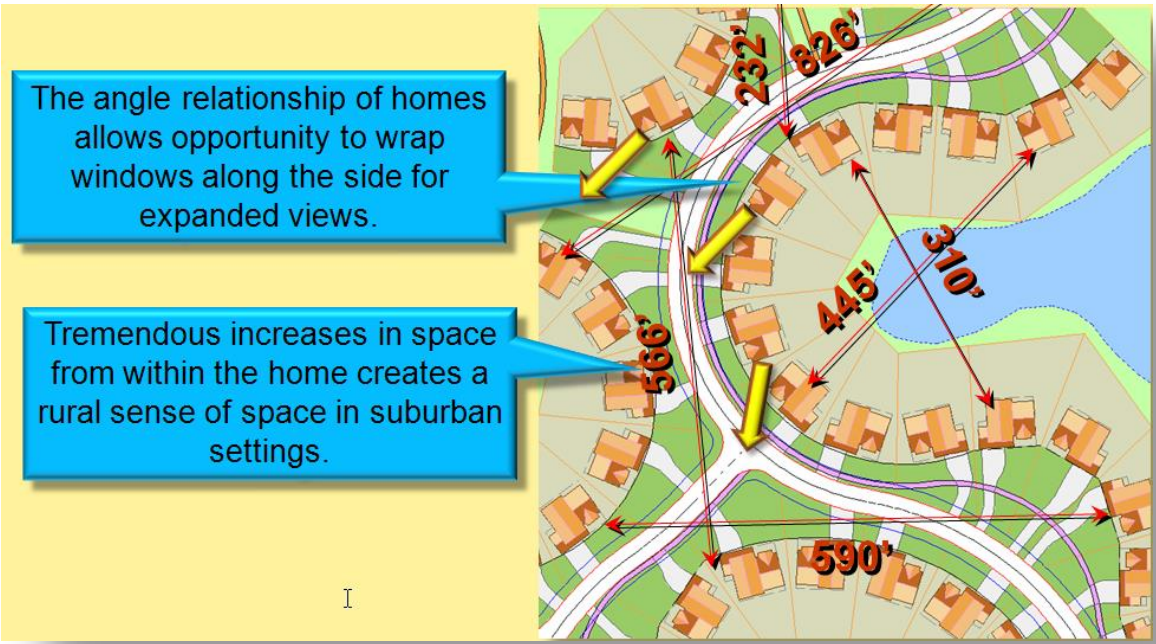
View-sheds from Within the Home & expansion of space

The consumer looking to buy a home typically seeks a particular size and may walk away from the potential sale if that minimum size is not met. That stated, there are methods in Prefurbia design to make the consumer think that a home is much bigger than actual size, thus feeding the hunger for space, yet coming in at or under budget with less heating and cooling costs.

That same home buyer is not likely to care if the lot is 7,500 sq.ft. or 9,231 sq.ft. or 12,000 sq.ft. They will only care how much space the lot 'feels' like it contains. Designed increase of space is where methods of Prefurbia including shines, by creating density that feels less than is actually produced.

To provide a "feeling" of increased space the builder must be aware of view-shed opportunities from within the home to adjacent space abutting it. This is accomplished by 'Architectural Shaping' and 'Blending'. The best source for this information along with the proper tools to accomplish the design techniques with is described in the book Prefurbia.

This document explains critical spatial aspects for builder's success in Prefurbia development. As you can see on the drawing below the angles of the home can provide huge distances from the living spaces within the houses down the street – and from home sides and home rears.



This gives a perception of space that expands far beyond that of a grid designed development.

Of course, if there are no windows, there is no view – no premiums and less profits!

This is a picture of Hunters Pass in Albertville, Minnesota by K. Hovnanian. It shows a proper coved home setting with windows that wrap along the side of the home overlooking a detention pond that is positioned around the home: rear to side to front.

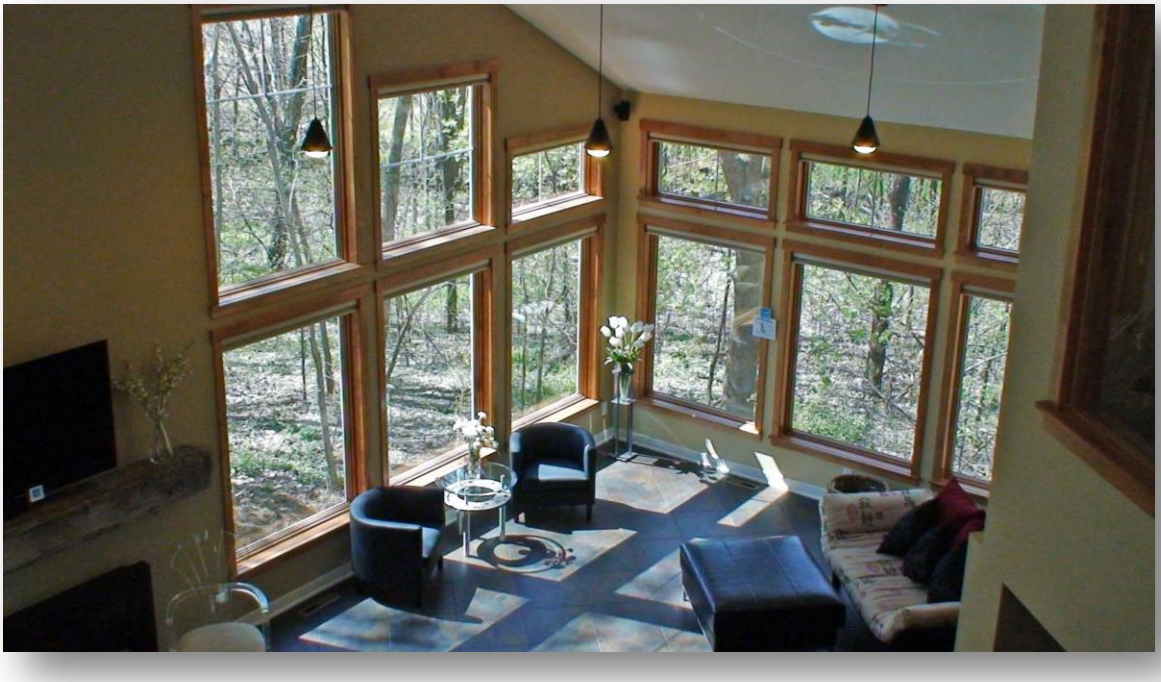
Allows expanded views and increased light to enter the home.

Homes that expand from the inside to the outside will increase perception of space.

Since a planned neighborhood using Prefurbia methods models architecture for increased views it is easy to accomplish.

The above picture is a Prefurbia urban development. Note the staggered multi-family units providing 'end unit' view premiums for all units!

From conceptual to actual takes a coordination of all the design professionals at initial stages of planning aided by LandMentor software.



Meandering Walks

All neighborhoods designed by Rick Harrison Site Design Studio are planned with meandering walkways, unless the site is too small for a dedicated pedestrian system, or there is some mandate preventing them, which is rare.

A gentle rate of meander can be seen here in Lennar's Settler's Glen in Stillwater Minnesota, a neighborhood that maintained reasonable home sales after the home market collapsed during the recession.

The meandering rate is the amount of depth from inside edge of walk to curb that both developer and municipality is comfortable with, but more aggressive, the better the curb appeal.

Settlers Glenn, Stillwater, Minnesota

In all cases the walk should not encroach into the front yard as if it would have been built at the standard setback (house front to walk edge).

If there are doubts as to whether the home may not sell because of a situation where the walk is far away from the curb line, then set those fears to rest.

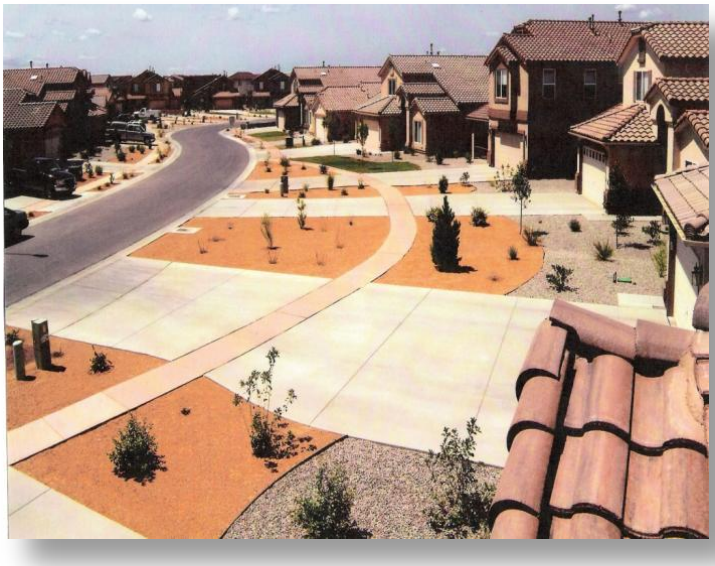
Dean Parkway, Minneapolis, Minnesota

One of the most exclusive established neighborhoods in Minneapolis is Dean Parkway and Lake of the Isles both of which has gracefully meandering walks planned a century ago. These walks meander a considerable distance from the curb at a varying rate similar to typical coved design.

The more walks meander, the more exclusive and exciting the neighborhood becomes. An added benefit is that it also becomes safer because vehicles and pedestrians are separated.

D.R. Horton's, Paseo de Estrella (Albuquerque, New Mexico) won the States 2005 Residential Development of the Year Award.

This 161 home neighborhood sold out in less than a year. All of the streets and meandering walks were constructed before the homes were built, which helped generate sales.



Paseo de Estrella, Albuquerque, New Mexico

Cantura Coves, Mesquite, Texas

Cantura Coves in Mesquite, Texas (also D.R. Horton) was the first coved design to implement meandering walks.

Instead of the city requirement having two 4' wide walks on each side of the street, we used a single more functional 5' wide meandering walk.

Unfortunately in Cantura Coves, we did not define the walk in easements and in the effort to match the plan some areas were not built as intended.

Thus, meandering walks should always be set in a defined easement to prevent location problems. Today, we typically use a single 6' wide meandering walk or two 5' wide walks on each side of a busy street.

This system where walks along low traffic streets are built on one side reduces costs and impervious surface area while providing a walk wide enough to be used for a variety of pedestrian traffic. In very low pedestrian traffic situations, serving a few homes a narrower walk is warranted.

Walks as an alternate Emergency Linkage

Emergency cross-walks through blocks are used to provide added safety through neighborhoods, as can be seen here in Westridge Hills of Delano, Minnesota.

A wide walk - emergency vehicle access through a block.

These 'emergency walks' are typically 8' wide but in some cases the municipality may require additional width. Note the mountable curb for emergency vehicles, typical of these dual purpose walkways.

In this example, the engineer destroyed the effect (and their market) by designing wildly erratic walks along the street. Again, we cannot stress enough, any change in the design must be communicated and approved by Rick Harrison Site Design Studio!

Copper Ridge (above) has been reported as being the strongest selling development in the State of Montana. Located in in Billings, note the gently meandering elegant walks in this coved development and the wider emergency walks through the blocks.

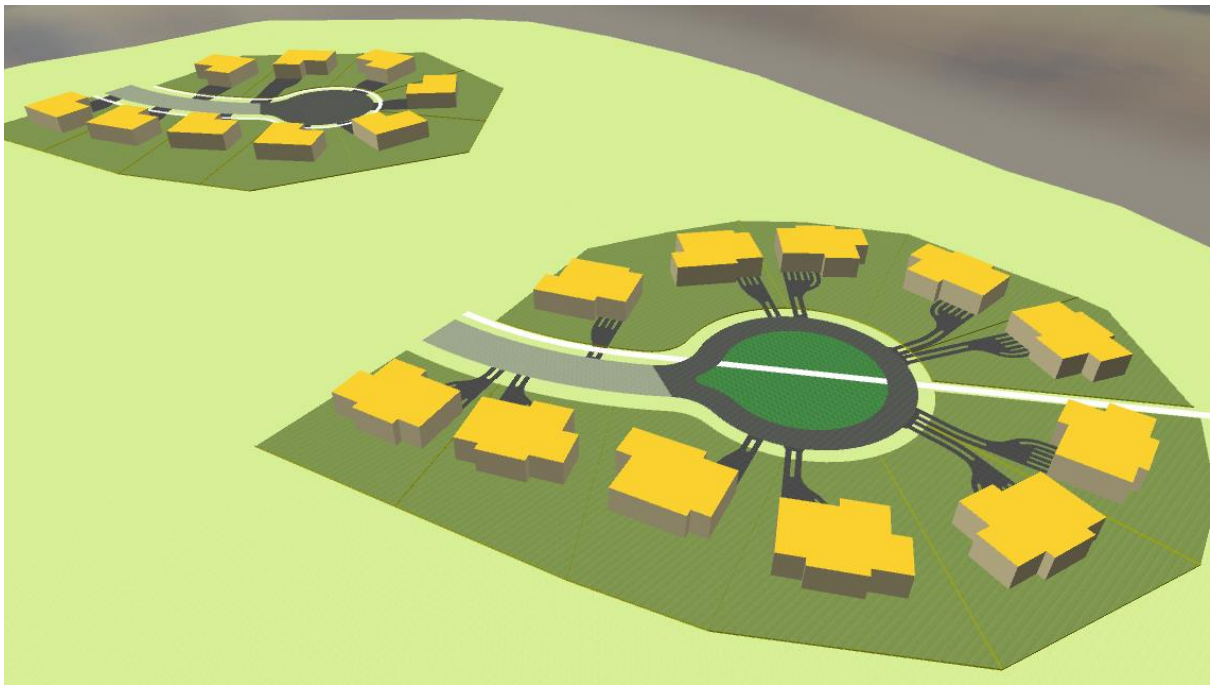
Another very strong selling development in 2013 has been Remington Coves in Otsego, Minnesota as seen below from a picture taken mid-summer 2013. By the end of summer all lots had sold homes.

Lesson:
Properly constructed meandering walks provide expedited sales!

DRIVEWAYS

Driveways should taper to the narrowest width that both developer and municipality is comfortable with, especially on longer driveways. This not only reduces costs, but also environmental impacts of impervious area.

On the preliminary plat we take care to add some character to the look and feel of the driveways, thus, the preliminary plat should be referred to for driveway design ideas. We often take the time to create landscaped strips in the driveways which lower installation costs and environmental impacts even more than just tapering alone!



The cul-de-sac with the deeper setbacks and three car garages inset from the home has significantly less average driveway surface area than the conventional cul-de-sac with dominant three car garages!

Increased curb appeal with much less cost!

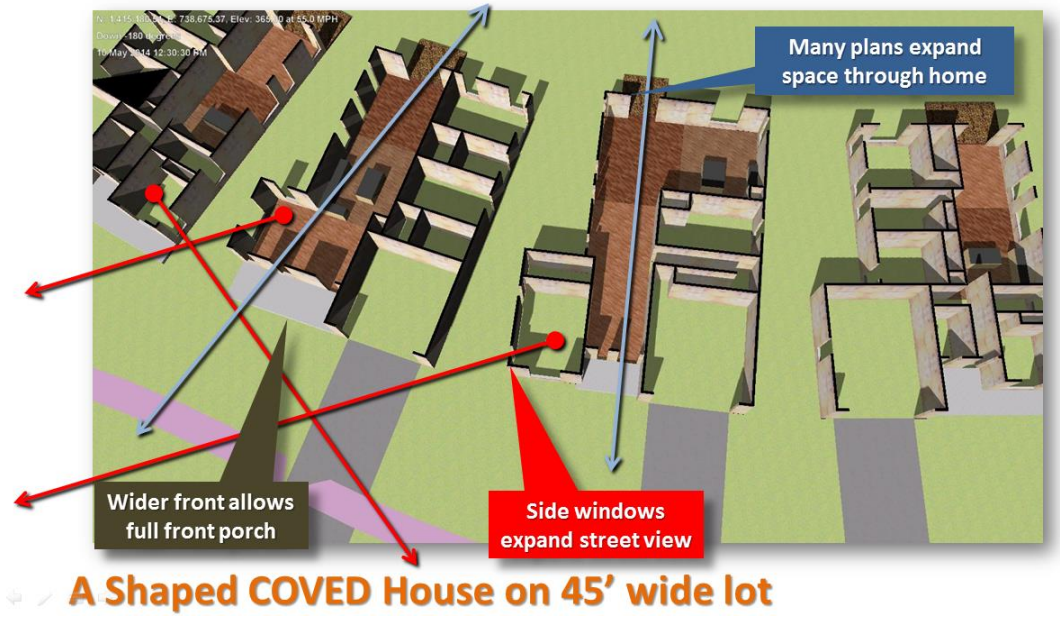
NO!

The above driveway is exactly what can go terribly wrong in coved developments when attention to this very important detail is ignored- the only winner here is the concrete contractor! The driveway should have been built as below (photoshop):

Curb Appeal: Architecture and Landscaping

Ideally coved design should have pedestrian oriented street design – this means architecture that encourages bringing neighbors to the front yard, which means including porches or similar architectural elements.

This does not mean you have to have a porch instead of a three car garage. Lennar Homes in Settler's Glenn (Stillwater, Minnesota) provides suburban homes with three car conveniences and front porch living. The greatest value is when the shapes of the lots coordinate with the shape of the home pad as seen below (described in Prefurbia – taught in LandMentor):

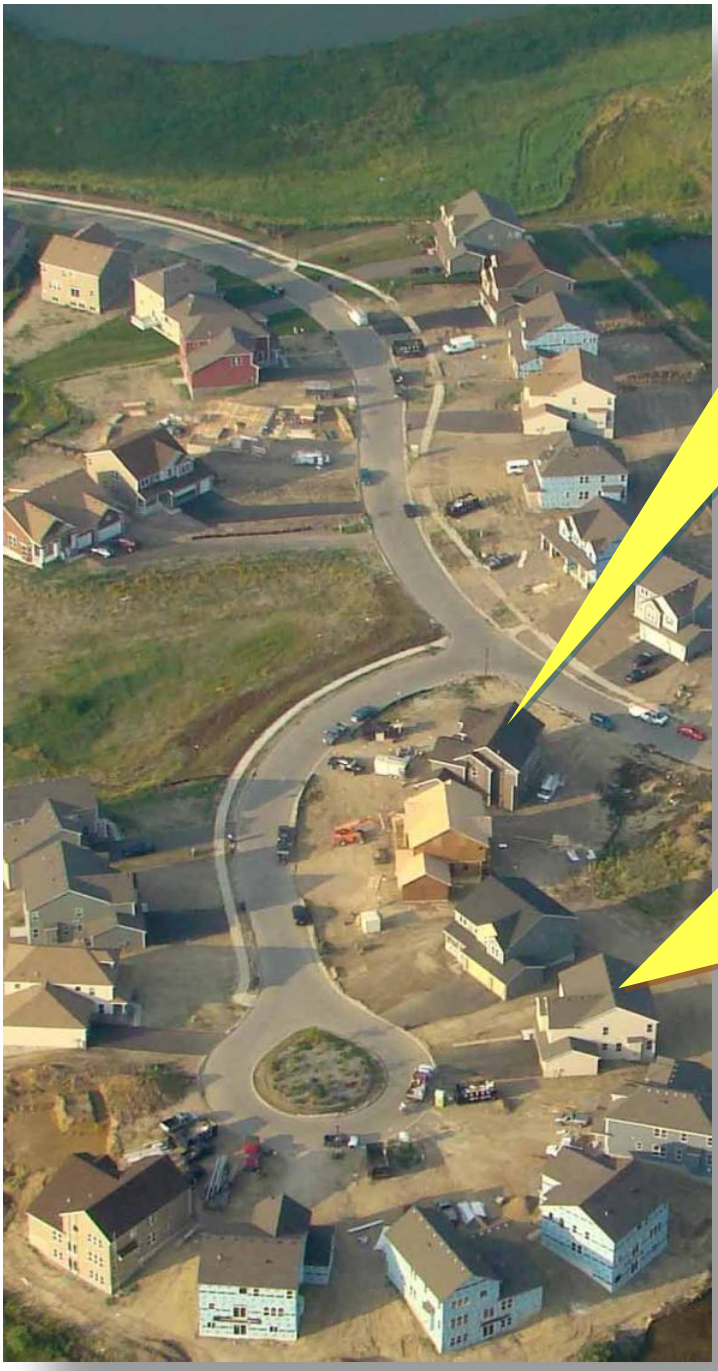


The Villages of Creekside, in Sauk Rapids, Minnesota shows that suburbia can have it all – space and character without busting the bank account.

The worst that can happen…

The **Civil Engineer** and **Surveyor** misunderstood the coved process, and set the homes as you see here…. there were several more mistakes made throughout this development that destroyed values!

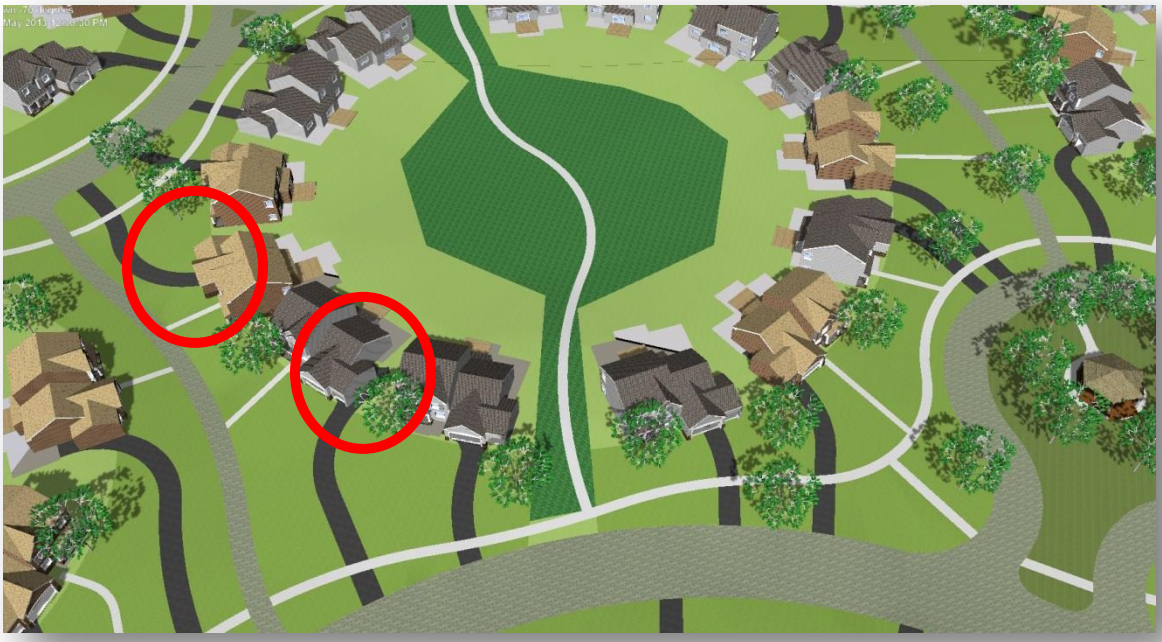
The engineers destroyed a RHSD, Inc. design that offered a higher standard of living on a beautiful lakeshore amenity, and instead created a mess. The result was much lower home values with increased costs.



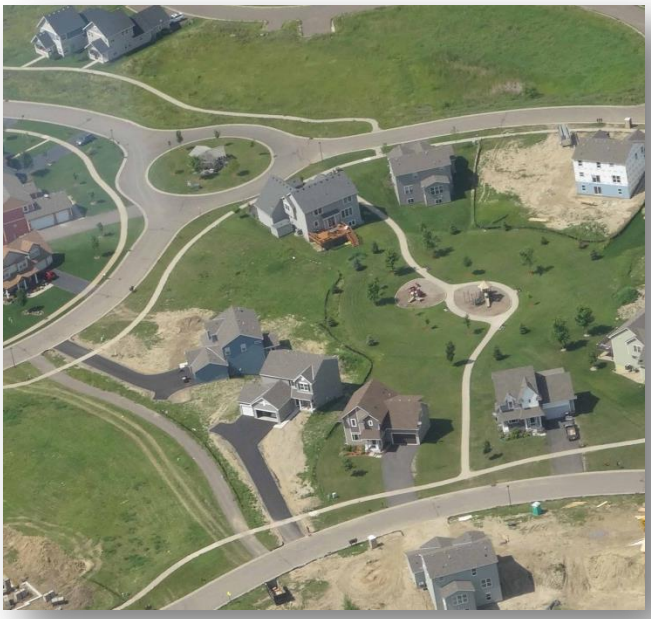
This home was miss-placed – the plan by Rick Harrison Site Design indicated for it to face the corner, thus would have directly viewed the lake from living areas in the home. A mistake (30 degrees off), significantly lowered both value and marketability of the home!

The angle of this house is off also - destroying the effect of the coving and cutting off the view of the house next door to the open space at the intersection – again significantly lowering the value of both homes simultaneously!

Any revisions of the site plan should be sent to RHSD, INC. E-Mail Rick Harrison directly at: rharrison@rhsdplanning.com



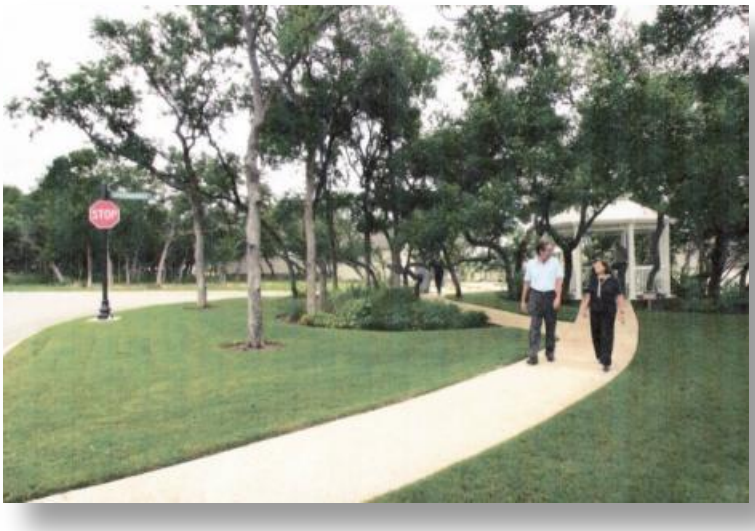
Note on the above image from the original site plan, the location of the driveways and then look how the builder placed the driveways:



The builder flipped both homes increasing the length of the driveways while increasing construction costs by several thousand dollars! Perhaps they thought that the façade of the home seen from the street would add curb appeal, but it sacrifices views from within the home.

The builder was one of the top ten in the nation, yet they did not want to have us educate them because they saw no need as the homes were selling strong – wrong! Fast sales - is not a guarantee that everything is the best it could be. Not a major mistake, yet still not the best placement either.

The vast front yards provide opportunities to have ‘streetscape forward’ landscape themes. This example of Sitterle Home’s Roseheart, in San Antonio shows a meandering walk that goes through a Gazebo set in a ‘deep coved front’ of a home which also defines the entrance of the cul-de-sac.



The above gazebo is actually in a small ‘park’ cut out of the lot corner along the street intersection.

Throughout the Roseheart, neighborhood, landscape elements are used to encourage residents to use the streetscape and facilities as well as a main trail system along natural areas in home rears.

Westridge Hills in Delano, Minnesota, has large cul-de-sac islands landscaped with low maintenance, attractive landscaping. A landscape “theme” throughout the neighborhood provides consistency - important in any neighborhood, not just coved.

A street trellis and bench as seen in Prairie Creek of Kildeer, Illinois.

A neighborhood of exclusive homes originally commissioned by Pulte shows how a simple element can add character.

Note the walkway is a natural while rock surface.

As can be seen in The Villages at Creekside, in Sauk Rapids, Minnesota, wetlands can be upgraded and man-made prairies can replace vast sod areas to create a rural character typically lost in suburban settings.

Prefurbia is a far better platform to create a low environmental impact theme than developments of more rigid design.

BayHomes

BayHomes are similar to coving - there is a substantial reduction in paved surfaces traded for an increase in green space IN THE FRONT YARD. Unlike coving (which is not typically used to increase density, BayHomes should result in an increase in density and an increase in open space over conventional subdivision.

Unlike Coving, which can utilize any house plan, BayHomes are architecturally restricted and must coordinate the interior room functions along with the inside walls and windows as a primary part of the overall neighborhood planning process. As you can see above, room functions (colors) are located at primary places within the home to take advantage of increased views.

Lower quality views (paved surfaces and parked vehicles) are either eliminated or greatly reduced.

Shown here is the first "BayHome" community site plan, "The Greens" by Tom Palmby and Sam Montgomery in Hutchinson, Minnesota. Note the front porches, walkway interconnect and rear parking (three car garages).

What defines a Bay Home over other forms of "detached single family townhomes"?

- The parking is in the rear with two or three stall car garages. Single car garages are not encouraged but allowed.

- The "Front" of the homes MUST have a front porch or "porch-like" feature as a sitting or gathering area.

- Generally the architectural designs use neo-traditional standards but are not limited to the traditional look. In fact contemporary and innovative architecture should be encouraged.

- The front "porches" must be tied to a sidewalk system, Bay Homes are pedestrian oriented neighborhoods – single family detached townhome projects are car orientated.

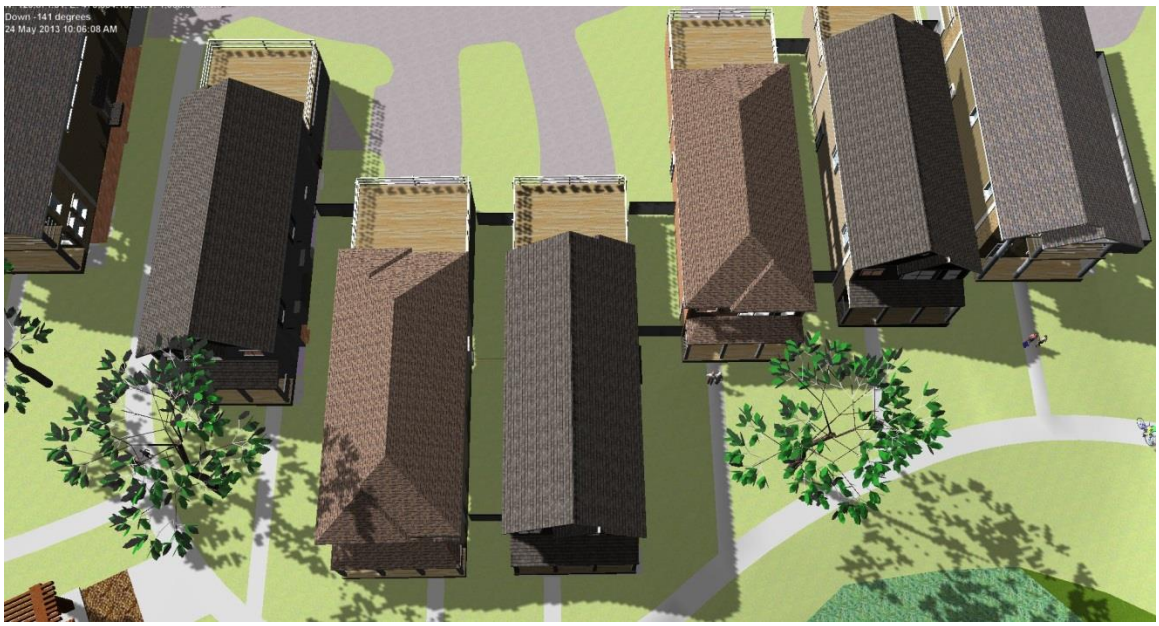
- All major living space must be oriented to the home "front", or "Porch" side.

Unlike coved lots where the homes are very orderly forming curves, BayHomes are staggered to allow architectural breaks with increased opportunity for panoramic views from the living areas.

BayHomes provide a panoramic view of the streetscape from within living areas of the home – particularly (typically) from the kitchen to the front gardens (commons) or streetscape. In this example of Remington Coves in Otsego, Minnesota the living area of the BayHome looks across to coved single family homes.

BayHomes mimic townhome ownership with the structure owned and all other space is common with maintenance free living through a homeowners association.

Zero lot design should be encouraged as to allow a private fenced “patio” area between the homes to utilize this space as shown below:



Side Yards should not exceed 10’ between homes (10’ should be used as a minimum).

Side windows where homes overlap are discouraged unless overlooking a private “patio”. The majority of side glass should be at the overlap viewing the park-like front common areas.

Long rows of BayHomes without angle breaks should be avoided, unless as is in the above example it is un-avoidable due to site restrictions.

Other than a collector or arterial street, BayHomes should face open space (as above), not streets.

Like Coving, BayHomes should encourage deep front setbacks making both Coving and BayHomes blend very well in the same neighborhood.

Because BayHomes typically have guests enter the garage side (rear) as well as the front, the rear of a BayHome must be architecturally inviting as well as the front – four sided architecture is required.

A BayHome has architectural detail along all exposed surfaces unless overlapped by another BayHome and screened from view.

A façade that stops at the first corner results in plain side yards exposed and an awful situation to be avoided as can be seen here in this un-inviting BayHome.

Also the consumer will expect that an association maintained environment with walks will actually contain lawn, landscaping, and – walks!

Here the consumer see's no walks and association maintained 'dirt'.

Large areas of sod without landscaping should be avoided. This area would be better served with more natural landscaping or best suited as part of the natural surface flow such as rain gardens or man-made prairie.

Long plain wall surfaces that are exposed should also be avoided.

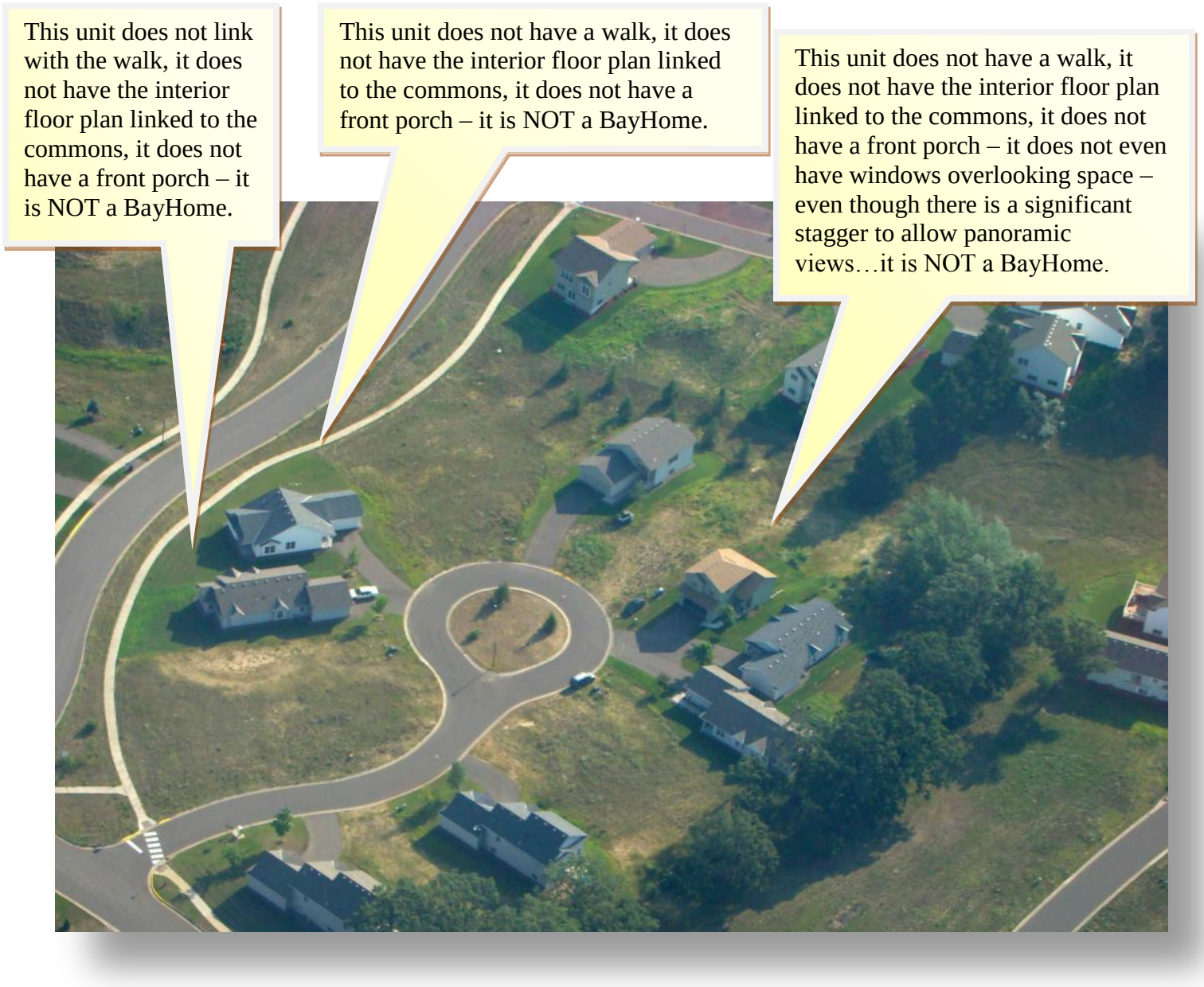
BayHomes must be designed with four sided architecture with character building architectural elements as a "delete" item where walls overlap.

Here is an attempt at a BayHome with no walk connection from the porch to the main walk where the picture was taken from.

All BayHomes must have walk connections from every front porch to the pedestrian system. Thus, these are NOT BayHomes!

This last picture clearly shows that where the homes were planned to intentionally overlapped to allow the panoramic view from within the home to the commons. Since they neglected to actually place any windows for the panoramic view, these must not be considered BayHomes.

Like coving, a detailed description of BayHomes is found in Prefurbua.



All of the above examples on a development in Minnesota presented as BayHomes shows how critical elements were not built as represented.

If any of the above elements are neglected – it is NOT a BayHome neighborhood.

Let in the light and space!

The floor plan of a BayHome should place as much space and light in the front (the porch side is the front) as possible…

Open floor plans are a must to attain a sense of flowing space.

This means that the planner must be at all times involved in the placement of the BayHomes.

Keeping in mind all of the above advantages come with some restrictions in design.

These restrictions are critical to the production of the next generation of community with higher standards of living for ALL income levels.

From a Land Developer's Perspective:

As a developer who made the decision to go above convention to use these new designs, it would be a shame that your vision was not realized and your profit potential sacrificed.

As the captain of your ship, you need to make sure the contractors are aware of these critical design elements.

From a Builder's Perspective:

Desire – the key word you want your home buyers to have on top of their minds when driving through the neighborhood and looking at your home. You are building a home in one of the most advanced sustainable neighborhoods ever designed. To simply place "Plan A or B" on a lot without regard to the view-sheds will lose much of your market advantage, thus reduce or destroy the "desire" factors. This document gives you the insight to make better decisions to assure home placement is exactly as planned and can influence the home buyer to choose your house above others. If you want <u>any</u> deviation from the site plan setting please contact us. Also MAKE SURE your sales staff sells the neighborhood – not just the kitchen!

From an Engineers Perspective:

As a Surveyor or Civil Engineer you have an awesome responsibility to be sure these neighborhoods are built as intended. Any deviation from the original approved preliminary plat should be cleared by the planner.

LandMentor is an advanced system of software, hardware, training and mentoring required to successfully duplicate the pioneering designs within Prefurbia available on a limited basis to consultants that can demonstrate the desire to be on the cutting edge of sustainable growth.

From the Municipalities Perspective:

You all voted for this new wonderful way to live promising a higher living standard that a wide variety of families can live in. We highly recommend that you have all your Planning Commission members and Council Members read "Prefurbia" which can be ordered through: www.rhsdplanning.com This book goes into more detail on an overview of a new way to look at land development.

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763-595-0055
www.rhsdplanning.com

Any revisions of the site plan should be forwarded to RHSD, INC.
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