

琅琊
LANG YA

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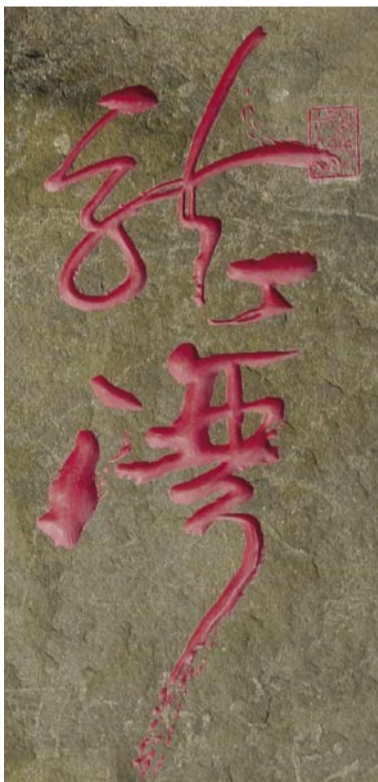
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一个可持续发展的明天、一个繁荣兴旺的未来

A SUSTAINABLE AND PROSPEROUS FUTURE

青岛市规划局给了我们一次机会参与青岛卫星城镇—琅琊组团的总体规划,我想在此表示感谢。我对夏耕市长和市政府领导关于建设生态型可持续发展的青岛的远见卓识深感赞同和钦佩。青岛市致力于对历史遗迹、环境、自然景观的保护和综合管理,以及在可持续发展方面的投入和所取得进展,令人惊叹不已。这一切都为我们“认真思索、细心体会、准确定位、富有灵感”的设计创作埋下伏笔。它也将深深地激励着我为青岛市的宏伟发展蓝图贡献我的才智。



I wish to thank the Qingdao Urban Planning & Programming Bureau for this opportunity to participate in this transformation of Qingdao Satellite City Group — Lang Ya. I deeply value, respect and appreciate Mayor Xia Geng's central leadership and powerful vision towards an ecological and sustainable Qingdao! The commitment to a balance of historic preservation, environmental concern, landscape beauty and phenomenal progress in sustainable development is remarkable. The knowledge, experience and insights of my visits to Qingdao has prompted me to offer these concepts to facilitate your rapid growth.

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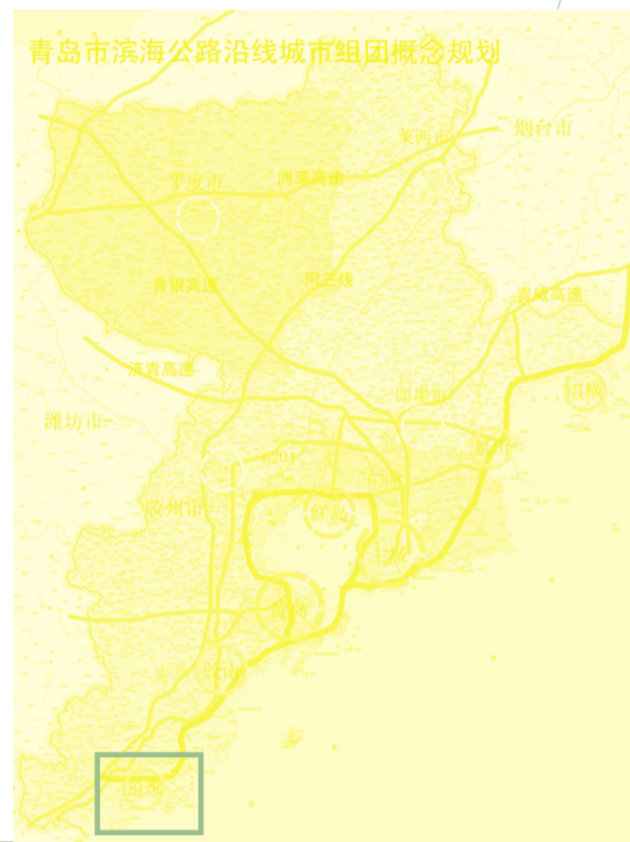
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每个灵魂都会为自己建个家,而在这个家的外面是一个世界,在世界的外面是天堂。要知道这个世界是为你而存在的,因此,建一个你所拥有的世界吧。

腊甫·瓦杜·厄姆森。

Every spirit builds itself a house, beyond its house a world, beyond its world a heaven. Know there that the world exists for you – build therefore your own world.

Ralph Waldo Emerson



琅琊台,历史悠久,与山海天然相接,它即为可持续经济、可持续生态及可持续文化的资源整合提供了一个非凡的机会,也为当今及未来在这块美丽的土地上生息的人民和游客提供了理想的热土。琅琊组团,它与青岛的交通系统紧密相连,将给整个区域不断地重新定位提供巨大的机会,并且有助于引导沿海地区和都市的开发沿着合理的方向发展。作为琅琊组团的规划,它必须时刻考虑大青岛的整体概念。

Lang Ya City Group, with its history and strong natural connection between mountains and the sea, offers an extraordinary opportunity for the integration of a sustainable economy, a sustainable ecology, a sustainable culture, and a place that encourages the highest aspirations of its citizens and visitors now and for future generations. Lang Ya, with its future transportation links to Qingdao, offers the whole region a profound opportunity to reposition the future and help guide the right form of coastal and urban development.

前言

Introduction

琅琊组团是一个山海相拥的非常秀丽的地方。为突显它山和海的灵气,我们为她未来发展所作的规划主要可以归纳为三个功能团

滨海地区:我们的设计理念是,保护海滨资源和滨海景观的整体性,珍惜管理滨海地区的珍贵资源和资产,充分利用和开发其旅游、生态保护、海洋开发研究及现代渔业的巨大

主要人口分布中心:几个城市发展区域,面向南边的大海,北接山脉。我们的规划控制了城市向南发展的空间,保持其现有的自然景观和农业景观隔断地带,这将是未来整个区域可持续发展和保持区域高质量发展的重要决策

农业园区和工业园区:可进行景观、生态及高经济产出的开发,如建设特色农业园、发展管理良好的生态工业等,以便于长期保护空间,保持区域的独特特征。

Recognizing Lang Ya City Group as an area of great beauty where the mountains meet the sea, our recommendation for future development can be categorized into three fundamentals:

1 Coastal Edge: Preserving the integrity and managing the coastal area as a primary asset, most specifically for the benefit of tourism, ecology, marine services, marine research and modern fisheries.

2 Major Population Centers: South-facing urban zones nested into the mountains on the north, and growth-managed on the south and separated by natural features - for long-term quality of life in the developed areas.

3 Open and Industrial Lands: Scenic, ecological, and highly economic applications such as specialized farmland and well-managed eco-integrated industries - preservation of open space for long-term character definition.

一个城市经济是否发达、文化是否昌盛、环境是否适宜居住,主要取决于市民的特性与能力。一个生机勃勃的城市可以激发和鼓励个体的发展,从而不断改善整个社会的生活质量。生活在这样城市中的居民在憧憬日益美好的生活的同时,一定会对未来充满希望。一个城市的宜居程度可以从人们的生活和工作以及休闲所形成的社区生活中得到反映。那些充满活力的小区都仔细考虑到了以下几方面:和谐统一、赏心悦目、社区服务方便周到。我们在规划设计中可以界定成优秀城市的几个要素,然而,我们必须牢记,有利于个体和社区未来的发展空间和发展潜力,才是城市发展规划最富有前瞻性的设计。

琅琊组团规划的一个主导是,必须在将国际国内旅游业的发展作为整个区域的经济引擎的同时,将其建设成为区域性的度假中心和旅游景点。滨海旅游业、地方和跨国工业的共同发展将促进新城区的开发建设。中产阶级数量的增长,人们的闲钱和闲暇时间的增加,以及国内外游客和内外资的增多,都是使城市发展进入良性循环的重要组成部分。服务业、公园、高校、商店、社交活动和旅游活动都成为这个地区总体经济和社会发展特征的外在表现,也是琅琊组团规划的整体内涵。

我们在琅琊组团规划中对自然环境的整体考虑——诸如地质、排水、日照方向、风向、潮汐和洪水等情况,以及边界条件(例如海洋、河流、山脉和平原)等等,为该地区的发展奠定了基础。在这份琅琊组团的规划方案中,我们建议突出对珍贵自然区域的定位、保护、恢复和相互联结,以增加其景观的整体效应。同时,为了保护该区域的旅游资源、自然资源、自然景观、农业用地和农业景观,对于整个区域的发展,我们进一步的确定了城市最大程度上的扩展边界。为了突显和保持琅琊台这一典型景观和历史标记的主导地位和中心景观地位,我们的规划限制了建筑物的高度和建设区域。除历史遗址、娱乐服务或特定旅游设施外,我们建议海拔30米以上的地区不应搞建筑,并且所有建筑本身高度不应超过100米。在组团规划中,我们还详细规划了配套基础设施,其中包括供水、配电系统、区域道路交通及电力分配所需的综合公共设施,也包括通往自然区域的公园的公共设施。

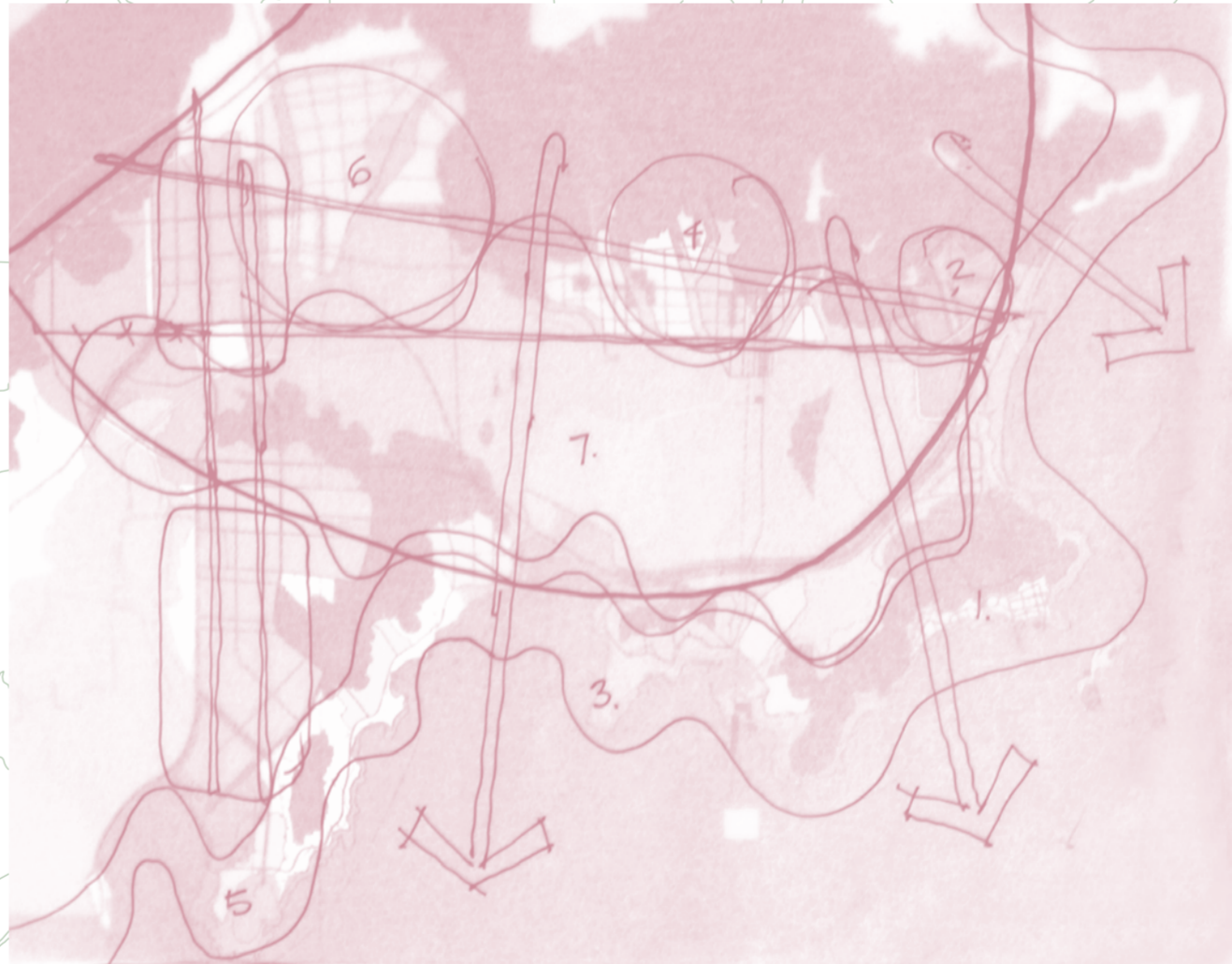
作为一个战略性的总体规划,我们规划的目的是为把琅琊组团从一个农业区转变为重要的、充满活力的、动态城市经济区奠定了基础。我们相信这个区域可以协调发展,在经济发展和转型的同时保持它秀丽的自然风光和环境特色。旅游业的开发和工业的重新整合会为她的经济增长创造机会,并为在这个地区安家的人们提供新的和更好的工作就业机会。这个充满生机的城市必将吸引国际旅游业的目光,成为未来城市的典范并在国内和国际市场竞争中占有一席之地。

Economically successful, culturally vital and livable cities result from the character and capacity of the people who live in those cities. A great dynamic city inspires and encourages the growth of each individual, resulting in an ever-improving quality of life for the whole community. The citizens of such a city must feel a real sense of hope, while anticipating an improved life. Livable cities are reflected in the street life as created by the people who live, work and visit an area. Such dynamic areas are best achieved by thinking in terms of coherent, walk-able and easily served neighborhoods. In planning we can set up definitions that facilitate the growth of successful cities; however, we must always remember it's the capacity for a citizen to grow and flourish that must always drive the urban result.

A critical economic engine for the region will be the growth of International and domestic tourism while serving as a regional recreational attraction. This coastal tourism and the co-development of regional and international industries will provide the work base for the new city zone. With the growth of the middle class, disposable income and leisure time increases and, together with foreign visitors and foreign investment, becomes an important component to the character and inherent city form. Services, parks, institutions, shops, social and tourist activities become definers in the overall character of the area.

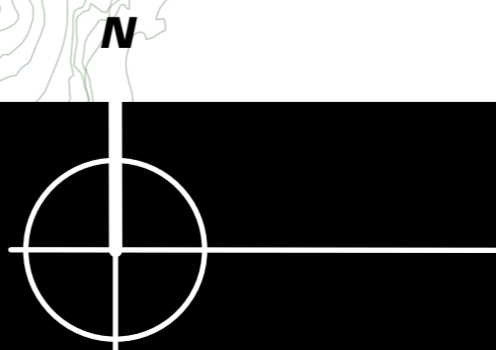
Our consideration of the natural environment — topography, drainage, sun orientation, wind direction, tidal and flood conditions and all relationships to natural boundaries or edges (such as the sea, rivers, mountains and plains) set a stage for successful growth. In this proposal for the Lang Ya City Group we recommend a strong action of identification, preservation, rehabilitation and connection of the valued natural areas. Further, we have defined urban growth boundaries (limits to sprawl), and structural limits both in height and construction zones. No significant building construction should begin above an altitude of 30 meters at its base, and rise no higher than 100 meters at its top, 'excluding historic sites', recreational service and specific tourist functions. This will maintain the pre-eminence of Lang Ya Tai as a visual and historic symbol. A carefully planned infrastructure includes integrated public facilities for the management of water supply, power distribution and general regional access, and includes public park facilities for access to natural areas.

This is a strategic master plan, and as such it sets the stage for the transformation of Lang Ya City Group from a rural area into a vital and dynamic urban economic zone. We believe the region can maintain its scenic and environmental character in harmony with development. The expansion of tourist access and the integration of industry will create opportunities for economic growth and create new and better jobs for the people who will call this area home. A dynamic and vital invitation for international tourism will cast the region as a model for the future and define its brand in the market place.



空间结构示意图:三个功能团的分布与整合

Spatial Structure Diagram: Integrated in three functional zones



我们设计的价值观和评估是建立在社区建设的四个基本原则上的:经济成就,环境健康,文化活力,创造性及表现形式新颖多样。这些原则是一个充满活力的、可持续发展的社会所必不可少的要素。可持续性就是在满足人们对高质量生活日益高涨的期望的同时,保护珍贵的资源。并着眼于未来。这一设计理念对社会和工业日益显示出其重要性,并为未来良性发展提供了巨大的潜力和经济效益。

Our evaluative method is based on four fundamentals in community building: economic success, environmental health, cultural vitality, and creative expression. These elements are essential for a dynamic and sustainable community. Sustainability protects valuable resources while fulfilling the desire of people for an ever better quality of life, oriented to the future. This approach is gaining importance in communities and industries, and brings with it a vast potential for beneficial growth.

设计理念: 执着地追求可持续性的设计原则和绿色设计的灵感 Approach: Conscious Response to Sustainability and Green Design

经济可持续性

可持续性植根于一个有活力的经济中!而社会中的每个人对生活质量的不断追求,使经济发展成为社会发展的最基本的动力。所有形式的可持续性的成功,包括社会的、智力的、或是生态的成功,都必定伴随着一个充满活力的经济。政府在一个区域内为人们的生活、工作和娱乐所制定的政策和规划即是一个新的经济框架的诞生。国内对外投资、旅游、度假及工业生产则是一个地区经济发展的引擎。因此,可持续性的设计理念是为一个新的经济框架展示其战略构思,也是为一个区域经济发展寻求“永动的引擎”。

生态可持续性

我们在这个星球上要维持生命的至尊和完整,就必须保护好环境资源的至尊和完整。我们人类在利用环境资源的同时,能否尽可能地降低我们对自然平衡的影响,将是人类能否维护环境资源以及赖以生存的人类自身的至尊和完整的关键。对自然资源的利用、开发和保护必须以社会文明、表达自由、生活愉快为出发点。我们的设计必须为人人追求富足生活、不为资源枯竭而恐惧、并保持与自然环境相协调提供一个美好的蓝图。

文化可持续性

文化活力是一个社会的基本要素,人们可以从分享现代生活方式及价值观念。可持续的文化追求的是一个延续不断的文化认同。这种文化认同是一个社会的活力和可持续发展的经济潜力,是社会不断向前发展的动力。我们的设计从文化发展和保护的角度出发,它能经得起时间考验,这些设计将不会随着时间的推移而过时。我们设计理念中对延续不断的文化认同的创作灵感,也是保证人们对我们设计创作延续不断的认同。

创造性的可持续性

人类社会要不断丰富想象力、并充分地自由表达、积累智慧和 innovation。否则,我们将无法面对日益发展的经济和自然保护相协调等各种挑战。学校、学院及相关文化教育机构是人们学习的地方。然而,新思想的提出则需要更紧密地联系未来之可能和发现。一个充满活力的地方,一个提供多种多样活动的场所,一个丰富多彩的生活社区,将会极大地激发人们的创造性。我们的设计就是要为人们创造这样一个环境、一个充满创造性的环境、一个可持续的创造性的环境。

Economic Sustainability

Sustainability is rooted in a vital economy! Economic growth, where each individual in a community has a sense of ongoing improvement in the quality of life, is an essential driving force. All successful forms of sustainability - social, intellectual and ecological, must have an association to a viable economy. Government policy and creation of a compelling place to live, work and visit creates the framework. Foreign and domestic investment along with ongoing tourist, resort and industrial activity become the economic engine of the region.

Ecological Sustainability

Environmental resource management is the dominant factor in maintaining the integrity of life on our planet. The integrity of the environment is based on our collective ability to engage necessary resources that minimize our impact on the balance of nature. The utilization, enhancement and preservation of natural resources must be directed in a way that allows for freedom of expression and a joyful life in community. We want to live in abundance and not in fear, while maintaining harmonious environmental conditions.

Cultural Sustainability

Cultural vitality, where a community can benefit from contemporary lifestyles and valued traditions, is essential for a society. With continuity of cultural identity, a community can have the energy and economy to pursue progressive sustainable futures. Development and preservation based in culture, generates solutions that stand the test of time and do not become outmoded with each passing decade.

Creative Sustainability

It is essential that the human community maintain an ever-evolving freedom of expression and growth in ideas. Without this, we do not have the energy to solve issues of economic growth and environmental preservation. Schools, institutions and the adjacent cultural and educational facilities are the foundation for individual learning; however, it requires deeper associations with potential and discovery to generate new ideas. A dynamic place with rich diversity of activities and experience provides much stimulation for creative growth.

绿色设计

绿色设计,从方法上说很古老,从技术上讲则很超前;它融合了所有可能的选择,探求各种设计方案,使环境和赖以生存的人类达到最佳的受益。其设计理念全考虑可持续性和经济增长这两个关键的驱动力量。建筑师和城市规划者经常面对的是复杂的综合的各种建设决策的选择。他们可以采用现行的成熟技术,或是采用技术含量低的古老的方法,抑或是采用仍在开发的尖端技术。作为一般的设计师,最后只能选定一种方式,而单一的方式又往往会限制进一步发展的潜力。成功的绿色设计包含了所有的选择和技术。这种设计思路和解决问题的方式是兼容的、开放的、基于团体的,并充分使用古老的、现行的和发展中的各项技术。

立地效益

充分考虑和了解立地的环境因素在很大程度上是成功的规划设计的关键,也是规划设计的灵感源泉。绿色设计的前提是追求立地效益的最佳化。因此,必须对地形地势、天气、光照、地质和水文条件、主要风向等立地条件和要素进行资料收集和评定分析。这就需要在进行规划设计之前对现场进行彻底详细的调查。这样拟定的设计方案才能突显立地效益、融和于周边环境并与之相匹配。例如,我们设计的琅琊城市组团的城市中心面向南方,周围小山环绕,这使新的城市突出视觉的优美、依山傍海、冬日和煦、风水宜人。

我们任何时候都要慎重考虑可持续地利用资源。比如,设计时必须考虑长距离运输材料的需要、制造过程及使用非再生资源等因素。有些设计方案在一定情况下可能是完美的,但可能造成过度的资源破坏,或者需要投入大量的能源及巨额投资。相对而言,一个基于立地条件的设计可以异曲同工,美妙动人,并藉此创造出地方特色。一个成功美好的设计不是各种漂亮图案的主观拼凑;而应该是集风土人情、立地环境、社会、经济、文化等等为本低的艺术再造。因此,它是独特的、唯一的。

被动建设方法

被动建设方法充分考虑和接受现有场地及周边环境条件,充分利用并受益于使用这些条件,而尽量不改变现有环境和少兴土木。这种创造性思想的实施因地制宜它包括采用太阳能建筑结构及使用房顶结构来缓和季节变化,把建筑物部分埋于地下以稳定地温,使用透光孔、反射镜及天窗等。所有这些措施都有利于采光,同时也可以控制热量的获得或损失。

通过计算太阳在不同季节的照射角度,可以设计出在冬天接受并储存太阳能,在夏天减少和限制光照的建筑。可以创造性地通过设置房顶、玻璃和天窗取得各种有利的采光效果。这种设计理念强调尽可能少投入、少改变立地条件,突出立地效益和设计的独特性。

技术上被动的材料和方法

我们的设计必须同时考虑利用技术上被动的材料,它指的是以新方式来使用的常见材料,例如,工程光纤产品,生物塑料或经过改造以提高热处理效果的混凝土产品。混凝土创造性地跟其它材料一起混合可以有很好很多的用途。例如,凝灰岩——一种在意大利建筑中使用的火成岩,其硅含量很高,具有稳定的保湿功能。采用这种石料的建筑随着季节的变化,室内温度能保持温和。通过在混凝土中加入硅,便可以造出类似凝灰岩一样热温效应的建筑材料。

设计还必须同时考虑技术上被动的的方法,它强调对材料的创造性的利用方法和非机械系统(即建成后无需额外提供能源的系统的利用方法。采用带有嵌入式管道传递热量的混凝土墙便是一个技术上被动的的方法。在向阳的混凝土墙内装上热虹吸传热管,可以无需机械系统,而把收集的热量送到其它地方,它也是一个技术上被动的的方法。

主动/机械方法

我们的设计当然也要考虑先进的高新技术超常规发展趋势,尤其是其中的一些技术已经相对成熟并逐步改进,例如使用地热能制热制冷、风力发电、低水头发电及光电技术。还有其他的一些更为超前的例子,他们反映了思维上和技術上的跨越发展。在未来的仿生建筑中,一些小的功能组合体将通过个性化的计算机探头进行自我调整,以充分接受光照、增加通风、传递热量、排水或蓄水,并平衡各个区域的环境。

另外,创造性地使用与季节变化相适应的自然隔热材料可以取得非常好的效果。例如置于屋顶的无土栽培花园可以使室内变得冬暖夏凉,同时这种无土栽培花园对食物生产也年年作出巨大的贡献。因此,一种与高新科技发展并行的、具有前瞻性的设计理念是我们成功的重要因素。

结论

我们的设计理念可以归结为执着地追求可持续性的设计原则和绿色设计的灵感。可持续性设计包括经济的、生态的、文化的、创造性的可持续性规划理念。绿色设计则是同时地、谨慎地、科学地综合采用了上述几种设计方法和理念。绿色设计以一种自然的、客观的方式精心整合了立地环境(土地、气候、景观等)的潜力和效益。创造性的设计方案来自于对每一个因素特征的诸多方面了解和综合分析,以及对各种设计方案的充分了解比较和对相关技术的充分了解和权衡。科学技术正以空前的速度向前发展着,熟知这些技术及他们的应用,和谐地与技术专家合作,这对于绿色设计者的总体规划设计是至关重要的。

Green Design

Ancient in technique, futuristic in technology, Green Design draws on the entire available spectrum of options in developing design solutions to the mutual benefit of both the environment and the human beings living in it. It is a holistic approach where both sustainability and growth are key drivers. Faced with complex building decisions, architects and city planners have many options. They can employ current established and proven technologies, or low-tech approaches utilizing centuries-old techniques, or cutting-edge developing technologies. Commonly, only a single approach is relied upon to an extent that limits a greater potential. Successful Green Design employs all of these available choices. Such thinking and problem solving is inclusive, team-oriented, and familiar with techniques that are ancient, currently established and developing.

Benefit of Place

Environmental conditions drive good planning in a deep, conscious way. The premise of Green Design starts with maximizing the benefits of place: land form, weather conditions, sun position, available geology and water conditions, site materials, prevailing winds. Assessing these characteristics requires intensive site analysis prior to conceptualizing the design. The design can then emerge from and be responsive to an intimate familiarity with the site and its environs. For example, the urban centers of the Lang Ya City Group face south, nestled into the foothills. This creates benefits of views, winter warmth and feng shui.

Careful thought must be given to sustainable use of resources at all times. The need to transport materials over long distances, the manufacturing processes, and the use of dwindling resources must always be taken into account when designing. A particular solution may be perfect for a given situation, but require resource destruction or excessive expenditure of energy to implement. Alternate local materials selections may achieve similar function with aesthetic appeal, and thus express regional character.

Passive Building Techniques

Passive building techniques acknowledge the existing site and surrounding environmental conditions, thus using those conditions beneficially without introducing active technology. The execution of such inventive thinking varies from region to region, from site to site, and includes building solar structures and utilizing roof forms to moderate seasonal extremes. Burying portions of buildings for the stability of the earth's temperature; using light scoops, reflectors and louvers; all help manage day-lighting conditions while controlling thermal gain or loss.

By calculating the angle of the sun in different seasons, structures can be designed to receive and store the sun in the winter months then shade and limit the sun in summer. A beneficial effect can be achieved with creative use of roof overhangs, placement of glass, and louvers.

Technologically Passive Materials and Techniques

Technologically passive materials are familiar materials utilized in new ways, such as engineered fiber products, bio plastics or concrete recipes adjusted to improve thermal performance. Technologically passive techniques bring together the inventive use of materials and non-mechanical systems (those that do not require supplemental energy after construction). Utilizing concrete walls with embedded piping to transfer heat is a technologically passive technique. The installation of thermo-siphon transfer piping in a sun-facing concrete wall can move the gained heat to other locations without a mechanical system.

Concrete can be configured with varying recipes for a number of creative applications. For example, Tufo, a volcanic stone used in Italian construction, is high in silica and holds moisture in a stable way, making the structure more temperate with each season. By adding silica to a concrete mix, a thermo-active product much like Tufo stone is created.

Active/Mechanical Techniques

More progressive 'high-tech' solutions are developing at an extraordinary pace. Some of these techniques are relatively established and see regular incremental improvements, such as the use of geothermal heating and cooling, wind power and low head-water generators, and the application of photovoltaic technologies. Other examples are more progressive and represent leaps of thinking and technology. In the bionic building of the future, smaller components will be self-regulated by individualized computer sensors to maximize day-lighting, improve ventilation, transfer heat, shed and collect water, and balance individually-zoned environments.

Creative use of natural insulation that is responsive to the changing seasons can have great effect. For example, rooftop hydroponic gardens can significantly reduce summertime temperatures and hold warmth in winter. Importantly, such hydroponic gardening is also a significant contributor to food production.

Conclusion

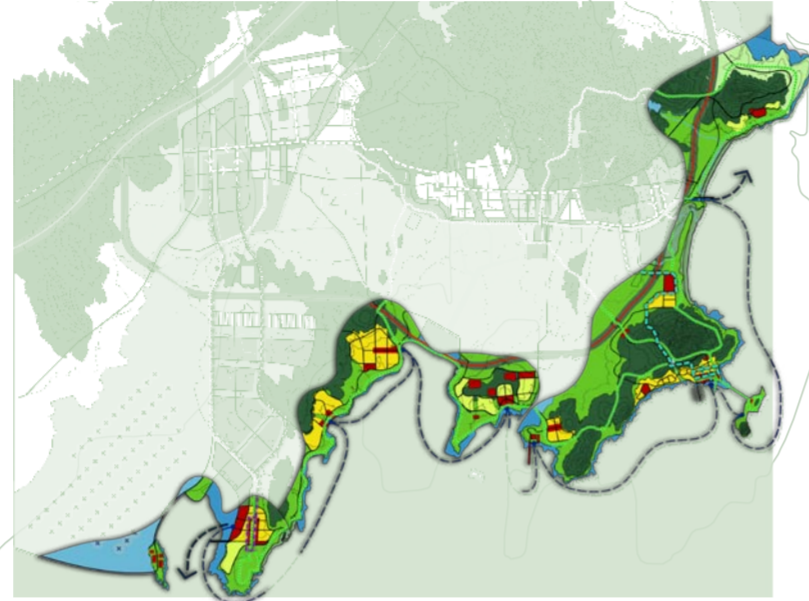
Green Design employs several of these approaches simultaneously, carefully integrating the potential of place (land, climate, views etc.) in a non-arbitrary way. Creative solutions emerge from having a diverse knowledge of the attributes of each situation, thoroughly considering and balancing the potential solutions and their associated technologies. Technologies are developing at unprecedented rates. It is critical to be familiar with these technologies, their application and to know how to work with qualified specialists who bring their focus and depth of knowledge to the overall plan of the Green Designer.



琅琊是一个生机勃勃的历史圣地。这里,山崖海角与滔滔海浪共舞,自然的气息熏陶着盎然的生命。这里是生活,工作和旅游的理想之地。

Lang Ya is a vital, historic place — for living, working and tourism — where mountainous marine headlands dance with the sea, and nature breathes abundant life.

结论 Summary

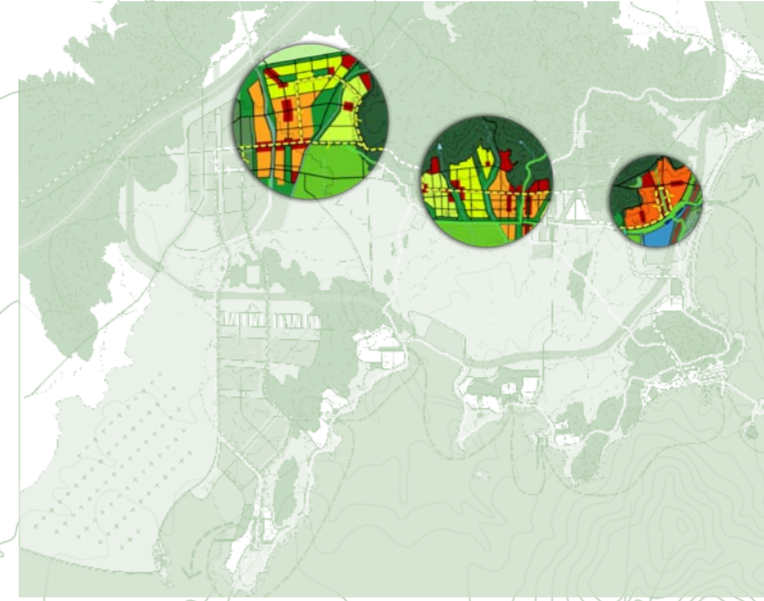


滨海地带:保护和管理好滨海地带,旨在促进旅游、生态、海洋服务业、海洋研究及现代化渔业。

1 Coastal Edge: preserving and managing the coastal area for the benefit of tourism, ecology, marine services and research, and modern fisheries.

这里,奇特的海滨陆角跳跃镶嵌在海湾沙滩之中。山海相交的奇美景观,奏出了这一工作,旅游和娱乐圣地的主旋律。我们的设计独具慧眼地把这里自然美和历史美的精华揉进了一个生机盎然的环境。琅琊台及其建筑是当地历史的标志,极具教育和文化价值;山区及其延伸出的海滨陆角和龙湾海滩勾勒出天然的美景。我们的设计把海滨陆角和龙湾海滩保护起来,作为世代共享的公共开放活动空间,同时也提供了一个健康的生态环境和优美的娱乐场所。我们精心规划的区域划分,道路选线,及建筑高度限制,都是为此设计的。独具风格的旅游和专业村构成新旧港口,既创造了就业机会,又为人们来滨海地带提供了方便。这一地带还是专业教育的基地,有新的海洋渔业站和新技术试点站。我们刻意规划了兼容大众旅游活动和高档度假区的多样化旅游社区。众多的选择能吸引各类游客,提高经济效益。琅琊台和新建的山海公园——山海相接的力作——为所有人享受海滩提供了便捷的通道。相比之下,车轮山度假区——以清代风格建筑——是一个纯的高效益中心。而水晶城则着眼于增长着的中产阶级。我们深知在选择规划方案时战略眼光的重要。但我们亦铭记只有切实可行的方案才能成功地完成从现实到理想的飞跃。琅琊旅游园区是连接山与海,历史与自然的可行之路!

Extraordinary Headlands and their flowing dance with the sea, set the tone of this working, tourism and recreational coast. A unique opportunity exists by combining the core physical and historic beauty with a living, active and abundant environment. Lang Ya Tai and its artifacts are the symbol of local history and offer education; the mountain, adjacent headlands and Dragon Bay define the beauty. The protection of the coastal headlands along with the Dagon Bay coast, as public open space now and for future generations, provides a healthy ecology with beautiful recreation. We have made very specific recommendations through zoning, minimizing road access and height limits to preserve the setting. Unique tourist and working villages, have existing and new ports to create jobs and open the coast for everyone. Interesting and highly useful educational areas include the new marine fisheries and test sites for new technologies. Our careful planning supports diverse communities of people in affordable tourism activities as well as upscale resorts. These contrasting choices provide for all, while upgrading the economy. The tourism areas around Lang Ya Tai and the new mountain to sea park — powerful mountain to sea connections — serves anyone who wants access to the beaches. In contrast the Chelum Mountain resort, in the Qing style, is an example of an exclusive high profit center, while Crystal City focuses on the growing middle class. We understand that it is very important that choices be made in visionary ways but we always remember that practical solutions make for successful transitions. Lang Ya Park is a walk-able connection between History, Mountain and Sea!

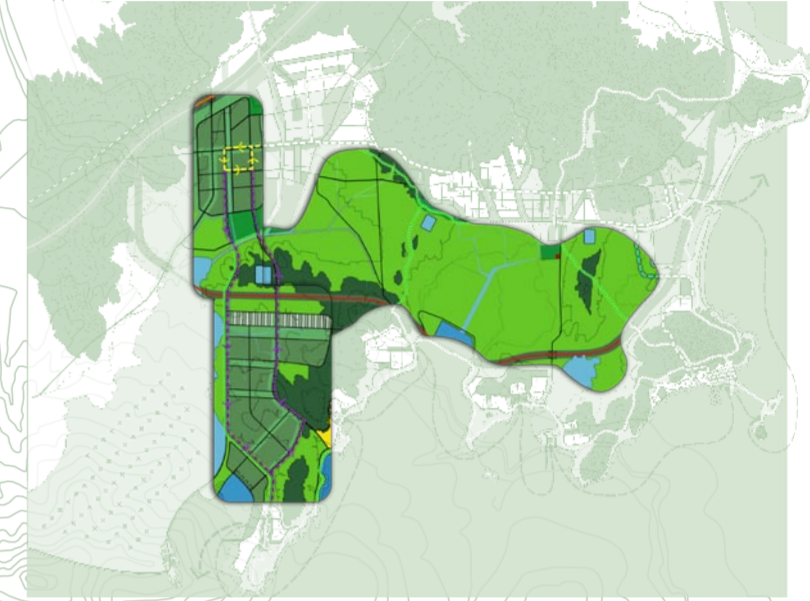


人口中心:座北朝南的城区,嵌入山麓,边界分明,可容85%的人口,并具发展潜力。

2 Population Centers: South-facing cities, nested into the mountains with well-defined boundaries, house 85% of the population at a good standard.

城市的发展需要边界控制,这一概念对于琅琊组团的成功建设至关重要。只有在发展边界清楚明了,社区结构完善,公园绿地充足时,城市才会繁荣兴旺。我们所提的步行社区是一种特定的城市建设规模,旨在提高生活质量,减少市民对机动车辆的依赖程度。高密度居民区有显见的优越性,如社区轮廓清晰,效率高,城市及商业服务便捷,基础设施集中,轻轨公交系统线路简便,扩建可塑性强,形色各异的景观环境相距不远,可望亦可及。我们的方案能让人们工作,生活和娱乐的地方都距公交网站不超过一公里。为了保持与自然景观的视觉对比,我们建议30米等高线以上不搞建筑,且所有建筑高度不超过100米等高线。破例的建筑需严格审批,只有市政和文化的标志性建筑,如市府大楼,可以超高。我们的设计提高了整个琅琊组团的发展潜力,使之成为居住和旅游的理想之地。我们方案中的轻轨公交系统使得各城区的边界清晰有效,整个组团的连接和交通快速便捷,在保持社区连续性功能的同时,创造了城乡交错,自然与人文景观相辅相成的组团结构。组团中各个经济区的活动虽是分散的,但居民的日常生活是通过在农业,工业和旅游服务业的工作整合在一起的。如此丰富多彩的经济结构,动态变化的生活环境,便捷的公交系统,充分展示了琅琊组团的发展优势。我们对城区的选址和对环境的保护,不仅留住了宝贵的农田和山地,也为绿色的、节能的建筑设计提供了良机。

The concept of Urban Growth Boundaries is essential for the success of the Lang Ya City Group. When clear limits to growth are well known and cities have strong neighborhoods with sufficient open Parklands, the citizens thrive. Walkable neighborhoods are of a scale that can become communities and reduce the dependence on any mechanical form of transportation. Obvious benefits of density include: efficient and well defined neighborhoods, accessible city and retail services, condensed infrastructure, a Light rail transit system with compact routings, and easy access to a diverse landscape experiences. It is our intention to have no more than one kilometer in distance for all the urban advantages. Our definition of building limits include not building above the 30-meter or taller than the 100-meter topography, maintaining the contrast with natural features. We are significantly improving the potential for the whole Lang Ya city group to become both a beautiful place to live as well as a great place to visit. The transit system supports the efficiency of urban boundaries by providing for easy connections and commuting among the whole region, thus offering the sense of an undivided community. The activities in various economic areas are dispersed throughout the region but the daily life is integrated through work in agriculture, industry and tourism, thus an undivided sense of the region. Such diversity and access make for a dynamic living environment. The positioning and natural protection of the city cores not only preserves valuable farmland and the mountains but offers excellent opportunities for Green, energy saving, Architectural Designs.

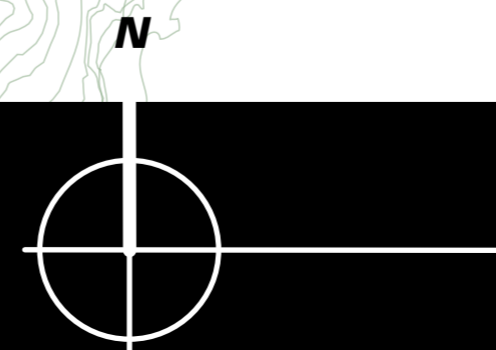


农业园区和工业园区:特种农作和生态整合工业是景观优美的、生态的、可持续发展的经济开发。

3 Open and Industrial Lands: Scenic, ecological, and highly economic applications such as specialized farmland and eco-integrated industries.

我们的方案致力于保护和恢复琅琊的自然美和自然资源。我们认识到,只有让经济能长期可持续地发展,才能真正保护住绿色空间。意大利的塔斯克尼(Tuscany)是通过严格控制实现经济发展与开阔景观地带共存的优秀例子。那里的经济效益是通过大量水产和旅游事业获得的。在我们的方案中,工业是生态绿地和农业用地的引伸。我们建议的是工农业结合的方案。我们可以利用工业区周边的绿带,也可利用工业建筑的屋顶作花园和温室。这样一方面大大增加了食物生产的质量,数量和生长期,同时也减少了能源和水的消耗量。生态绿带通过生物作用可以净化水质。污水处理和生物净化区同时也是极好的公共教育和公园用地。道路,轻轨和自行车道都可利用这些绿带美化路旁景观。为提高供水能力以满足市政和工业用水需求,我们把沐官岛水库作为工农业水源,而山地上游的几个水库都保留作市政水源。沐官岛水库同时还是风力发电的基地。奇特壮观的水上风车园可为琅琊生产1/3的所需电量。风力驱动的抽水机把水送到农用水库。水库泄流再产生水电,更增添了系统的效益。沐官岛水库旁的新港既可为工业,又可为旅游服务。我们规划的琅琊组团,是个巧夺天工的整合优化系统。它为琅琊保护了广袤的自然美,增添了经济文化的多样性,为琅琊人民设计了高水平的生活和可持续的发展。

Our plan is committed to the preservation, and where needed the restoration, of Lang Ya's Natural beauty and resources. We recognize that preservation of open space can only realistically occur when it includes long-term sustainable economic advantages. Tuscany, in Italy is a great example of where productive and scenic open space secured by strict control, the combination is highly economic from both high margin food products and tourism. In our review, industry is seen as an extension of eco green land and agricultural use. We are recommending combining agriculture with industry; using the adjacent green belts and industrial rooftops for garden and greenhouse plots, this can greatly increase both quality and quantity of food production year round, while reducing energy needs. We support and value the development of heavy industries and recommend that bio-eco green belts be made biologically active to preserve water quality. Infrastructure zones for wastewater treatment and bio filtration are also fine opportunities for public education and parks. Transportation links: roads, light rail and bikeways all benefit from the scenic potential of the region while serving commuters. We have made every effort to improve water capacity for both domestic and industrial use. The Muguando Reservoir would supply agriculture as well as industry. It is also a spectacular wind garden supplying the region with wind power, up to 1/3 the total required. The plan uses existing reservoirs and new farm reservoirs for hydroelectric power generation; the farm reservoirs make best use of wind pumps to maintain their gravity systems. Our plan includes a new port near the Muguando Reservoir that will increase industrial options and further integrate tourism. We see Lang Ya City Group as a well-integrated system arriving at a high standard of living from its diversity and vast beauty.

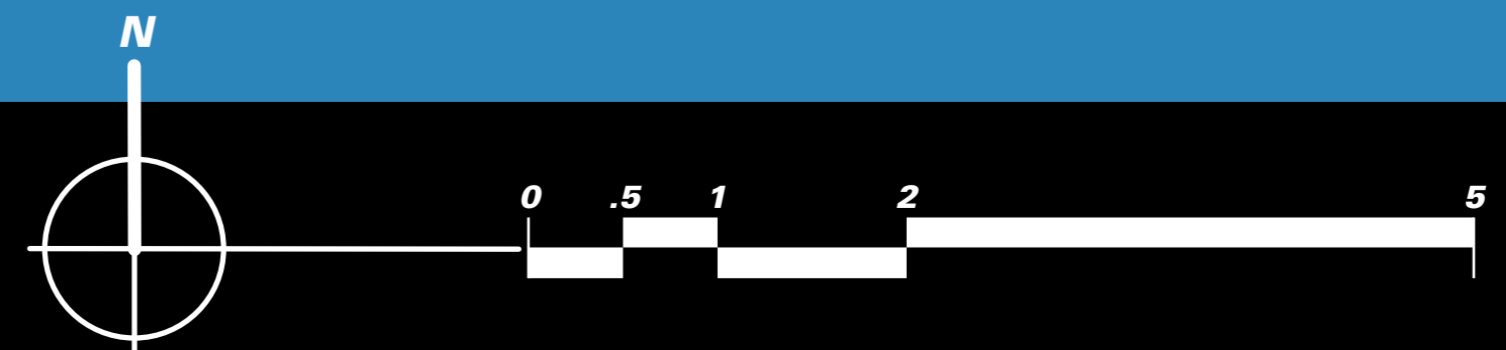


- 1 琅琊旅游公园
- 1.0 琅琊台
- 1.1 渔村
- 1.2 大众旅游社区
- 1.3 海洋研究所社区
- 1.4 山海公园
- 1.5 车轮山度假区
- 1.6 高技术渔村
- 2.0 水晶城
- 2.1 小游艇港湾
- 3 滨海温泉和高尔夫度假区
- 3.0 保健温泉和海滨度假村
- 3.1 企业旅游村
- 3.2 南岸旅游村
- 4.0 琅琊镇
- 5 南头港
- 5.0 南头船坞和南头港
- 5.1 南头公园滨海陆地
- 5.2 沐官岛和沐官岛水库
- 5.3 南头村
- 6.0 泊里镇
- 7 农业、工业和农业观光
- 7.0 专向农田
- 7.1 可持续农业研究所
- 7.2 无土栽培农业
- 7.3 重工业和中型工业区
- 7.4 污水处理设施
- 7.5 轻工业和中型工业区
- 7.6 水产养殖

- 自行车道/步行道
Bikepath/Walkway
- 公共交通A
Mass Transit A
- 公共交通B
Mass Transit B
- 公共交通C
Mass Transit C
- 地区轮渡码头
Regional Ferry
- 当地轮渡
Local Ferry
- 道路
Roads
- 滨海公路
Coastal Road
- 同三高速公路
Tongsan Expressway
- 铁路
Railroad
- 公共设施
Public Infrastructure
- 高密度住宅
High Density Housing
- 中密度住宅
Med. Density Housing
- 低密度住宅
Low Density Housing
- 高密度旅游区
High Density Tourism
- 中密度旅游区
Med. Density Tourism
- 低密度旅游区
Low Density Tourism
- 工业
Industrial
- 大山和原野
Mountains & Wilderness
- 旅游绿地
Green Land For Tourism
- 工业绿地
Industrial Green Land
- 公共住宅绿色园区
Public Green Residential
- 生态绿地和农田
Bio-Eco Green & Farmland
- 空地
Vacant Land
- 沙滩
Beach
- 湖泊和河流
Lakes and Rivers
- 潮间区
Intertidal
- 海洋
Ocean

规划结构图
Comprehensive Planning Structure and Integration

- 1 Lang Ya Tourism Park
- 1.0 Lang Ya Tai
- 1.1 Fishing Village
- 1.2 Affordable Tourism Community
- 1.3 Marine Institute Community
- 1.4 Mountain to Sea Park
- 1.5 Chelun Mountain Resort
- 1.6 High Technology Fishing Village
- 2.0 Crystal City
- 2.1 Small Boat Harbor
- 3 Coastal Spa and Golf Resort Zone
- 3.0 Health Spa and Resort Coastal Village
- 3.1 Entrepreneurial Tourism Village
- 3.2 South Coast Tourism Village
- 4.0 Lang Ya Town
- 5 South Point Seaport
- 5.0 South Point Shipyards and South Point Port
- 5.1 Marine Headlands at South Point Park
- 5.2 Muguando Island and Muguando Reservoir
- 5.3 South Point Village
- 6.0 Boli Town
- 7 Farming, Industry and Agri-Tourism
- 7.0 Specialty Farmland
- 7.1 Sustainable Farming Institute
- 7.2 Hydroponic Farming
- 7.3 Heavy & Medium Industry
- 7.4 Water Treatment Facility
- 7.5 Light & Medium Industry Zone
- 7.6 Aquaculture



我们的设计构想始于对立地条件的考察、研究、评估,以追求立地效益的最优化。琅琊组团的优势,以及其发展空间和发展潜力在于其独特的自然景观和资源特征。这些特征包括地质、地理、水资源状况、温和的气候、主导风向和日照状况等。作为一个战略性的总体规划,不需要精确的环境数据,因此,我们适当地做了一些假设。设计的基本点仍是着眼于确定滨海区域的总体布局及考虑与其相适应的技术。我们的设计方案源于对立地条件的理解和灵感,以及其与周围环境的相呼应。

Our design process begins by studying, evaluating and maximizing the natural benefits of Place. Lang Ya City Group offers both dramatic and subtle opportunities in its natural features and characteristics: topography, geology, water resources, temperate latitude, prevailing winds, and sun position. Since this is deemed a strategic master plan, it is not required to have precise environmental data and thus we have made appropriate assumptions. The fundamentals of the process still work to define the overall layout and to consider appropriate technologies for the coastal region. The design emerges from and is responsive to an intimate familiarity with the site and its environs.



分析:立地效益 Analysis: Benefit of Place

琅琊组团最显著的地理特征是依山傍海。北部的群山奠定了整个区域的大背景,沿海交错的海滨陆角和沙滩突显了海岸线的美丽和多姿多彩。琅琊台是琅琊组团的标志,引人注目,它是琅琊组团的标志性景观。组团的滨海地带有龙湾这样美丽的沙滩、优良的码头、平静的河口、开阔的潮间带和崎岖耸立的礁石,这些不同的、各有特色的景观都是琅琊组团不同于其他景观的优势。我们的设计就是要精心地、富有创造性地把琅琊组团的优点表达出来。我们的设计要体现对琅琊景观的保护和经济开发的最优选择。我们要通过我们的设计为琅琊

The most significant natural feature is the mountains and their relationship to the sea. The northern line of mountains establishes a background for the zone, and the wonderful coastal headlands engage the sea. Lang Ya Tai holds the position as the historic symbol and maintains its prestigious position within the Lang Ya City Group. Along the seashore are extraordinary beaches like those at Dragon Bay, fine harbors, gentle estuaries, open flood plains and craggy rock outcroppings. All these attributes establish the extent to which a person recognizes or recalls a particular place distinct from others; it is a measure of the identity, or sense, of that place. This sense of place can be enhanced through careful preservation and development, and then represented to potential residents, investors and visitors through a specific concept of branding.



区域位置:琅琊组团,由新建的高速公路、铁路和轮渡与青岛相连。青岛是胶东半岛国际商务和密集人口都市。青岛有国际机场、深水集装箱码头、高等院校和其他社会服务机构。交通便利和邻近的距离,使青岛对琅琊组团的经济发展有着举足轻重的影响,我们的规划必须同时以青岛发展战略为背景,考虑琅琊组团的可持续发展具体走向和布局。

向南及面向大海:琅琊组团所包括的区域南至大海北抵群山,这一自然向南及面向大海的走向本身就是一种祥和的象征。这使得大部分居民区和城区可以向南和向阳而建。此外,群山又进一步遮挡了城区的北面来风。这又为节省能源和合理管理提供了绝佳的条件。

流域:流域的概念在规划设计中是非常重要的。我们的设计充分考虑了琅琊组团两个自然流域的环境条件:恰好琅琊镇位于一个自然流域,泊里镇位于另外一个自然流域。琅琊流域内有琅琊台秀美的风光,适于旅游。泊里流域水资源丰富,适宜开发为工业区。我们必须按流域管理的概念,对于这两个流域的水资源和水质管理和分配作出合理规划。很自然,我们按两个水系的特性,分别建立两个供水系统,一个作为民用,另一个用于农业灌溉和工业生产。

天然港湾:沿海列入保护范围的许多南向的小海湾可以规划作为多种功能的港湾,例如,旅游、休闲、科研、渔业和工业等。这些天然港湾,水陆交通都很方便。

沼泽盆地:区域内低洼的沼泽湿地也具有其独特的风景,适于蓄水、停泊小船、科学渔业养殖和渔业科学研究。

历史焦点:琅琊台应该是整个区域范围内具有最高历史人文价值的景观标志,也是区域内整个海岸线上最醒目最美丽的明珠。它的自然特色和古老的历史美轮奂相相辅成,它独立于其他山脉,具有王者独尊的显赫位置。琅琊台代表着这个地区的历史价值,提升了整个地区的形象。

龙湾:龙湾是一个迷人的海湾,它那美丽的海湾和湛蓝的大海具有巨大的旅游潜力,是非常可贵的休闲娱乐旅游资源。我们应对这一宝贵的资源给予深思熟虑的规划和保护,必须着眼于旅游业的长远发展加以综合利用。我们建议对它进行多方面开发:我们的规划首先建议建设一个大型国家级或省市级公园,并在附近的滨海区域内设计一个高密度的建设区,另在琅琊台遗址及沙滩附近建设小规模且老百姓可以消费得起的度假区。经过这样精心设计,这片沙滩将来会和现在一样自然、美丽动人,并同时可以满足旅游观光、度假休闲的要求。

区域的形象和第一印象:作为一个好的规划,还必须考虑区域的形象和第一印象。可以设想,大部分游客会从青岛沿滨海公路前往琅琊台,当他们走到北部山区的半山腰时,便可以看到美丽的琅琊台和壮美的龙湾。这是整个区域的美好形象,也是对整个区域美好的第一印象。我们应该保持这个地方空旷广袤,以保持和突出这一美好的形象和美好的第一印象。城市建设区内可以进行高密度开发,但这个地方应该保留这种自然空旷的景观和开敞的感觉。

海滨陆角:这一特殊的、具有生态学重要意义的海岸地形值得我们仔细地考虑。我们应该通过限制公路来避免对这些海滨陆角造成大的破坏。我们可以通过修建自行车道及游人行道,使人们可以欣赏到这些海滨陆角的自然美和生态美。位于旧金山北部的 Marin County 县关于这种休闲通道的设置和风景区的保护提供了很成功的范例。

山地景观:我们认为应该对所有山区及其它坡地加以保护,避免非实质性开发,这是优化这个地区的经济及生态潜力的重要环节。我们建议将城市建筑限制在海拔30米以下,加上保留和维护农业景观和开闢地景观的控制,我们给城市建设作了非常谨慎严格的区域控制。这是对米来子孙后代负责,也是为保护山地景观、农业景观、开闢地景观,以提升整个地区的经济潜力和生态潜力的综合考虑。

海拔高差:海拔高度不同的益处及其潜在好处是显而易见的。水头海拔高差及排灌站海拔高度的不同有利于水力发电,在生活用水、工业生产及农业灌溉用水时这种高差效应尤其明显。

自然排水区:我们应该按照自然排水区分别科学管理城区地表水的排放和水质。可在各个排水区采用植被和初级生物过滤方法来净化地表水,以减轻污水处理厂投资和运营成本的压力,满足日益增长的经济发展和提高水质的要求。围绕这些植被和生物水处理区,我们也可以建成许多美丽的公园。

风力优势:冬天西北风夏天东南风的主导风向给风力发电提供了有利的条件。鉴于每小时平均风速可以达到18公里,值得进一步研究在这个地区进行风力发电的可行性。

温和的气候:这种沿海地区相对温和的气候,连同一个美丽清新的生态系统,给琅琊台地区提供了发展旅游业和工业得天独厚的条件,使之成为经济发展的理想之地和人们居住的理想家园。

Regional position: Lang Ya City Group, with its new highway, rail and ferry links to Qingdao, is within efficient travel time to international business and a major population hub. With its international airport, deepwater container port, universities and other services, Qingdao's proximity extends the potential and critical mass of Lang Ya's local economy, enhancing its development and sustainability.

South Orientation: Lang Ya's setting holds great promise; the land area predominantly faces south to the sea and is guarded by a line of mountains to the north. This allows most residential/urban areas to be oriented towards sun and views simultaneously. In addition, the mountains further protect urban zones from the prevailing northern winds. This situation offers excellent natural opportunities for preferred energy management.

Watersheds: This program takes advantage of the two major watersheds: Lang Ya Town watershed for tourism with its expansive views focused on Lang Ya Tai; Boli Town watershed with its richer water sources as the industrial zone. The separation of these two distinct zones is a powerful opportunity to manage water quality and distribution. It becomes relatively straightforward to establish two water systems: one for domestic use and the other for farming and industrial use.

Natural Harbors: The protected south-facing coves of the coastline can easily be used as ports offering various activities: tourism, recreation, research, fisheries and industry. These natural harbors can easily accommodate coastal public transportation to supplement other ground transportation.

Wetland basins: Lowland wetlands provide opportunities for scenic beauty, supply reservoirs, small boat harbors, technology fish farming and research.

Historic Focus: Lang Ya Tai is appropriately the aesthetically dominant coastal headlands in the project area. This natural benefit supports and is supported by the historic archeological zone. It is predominant and separate from the other area mountains and set along coastal headlands. Lang Ya Tai symbolizes the historic value, and promotes the branding of the region.

Dragon Bay: This amazing coastal beach, its beauty and connection with the sea has great capacity for recreation and entertainment. This important asset deserves careful consideration and protection, and must be used in sophisticated ways for the long-term success of tourism development. We recommend a varied approach: a large national/regional park, controlled high-density development near but not on the beach, and low scale economically accessible resorts near historic Lang Ya Tai and the beach. With such carefully planned access the beach will appear natural as it does now, while supporting the projected number of visitors.

Dramatic Arrival: Most visitors will arrive using the new Coastal Road from Qingdao, as they crest the northern mountain saddle, Lang Ya Mountain, its spectacular headlands, and the great beach of Dragon Bay appear. This deserves to remain an open and expansive image. Intense development can occur within defined urban boundaries, while still preserving the grand feeling of openness.

Coastal Headlands: this delicate ecological coastal topography deserves careful consideration. Limiting automobile access can preserve major segments of these headlands. Using bicycle and walking trails, visitors can witness the natural beauty and ecology of the headlands. Marin County, just north of San Francisco, has had great success in such preservation for scenic and recreational access.

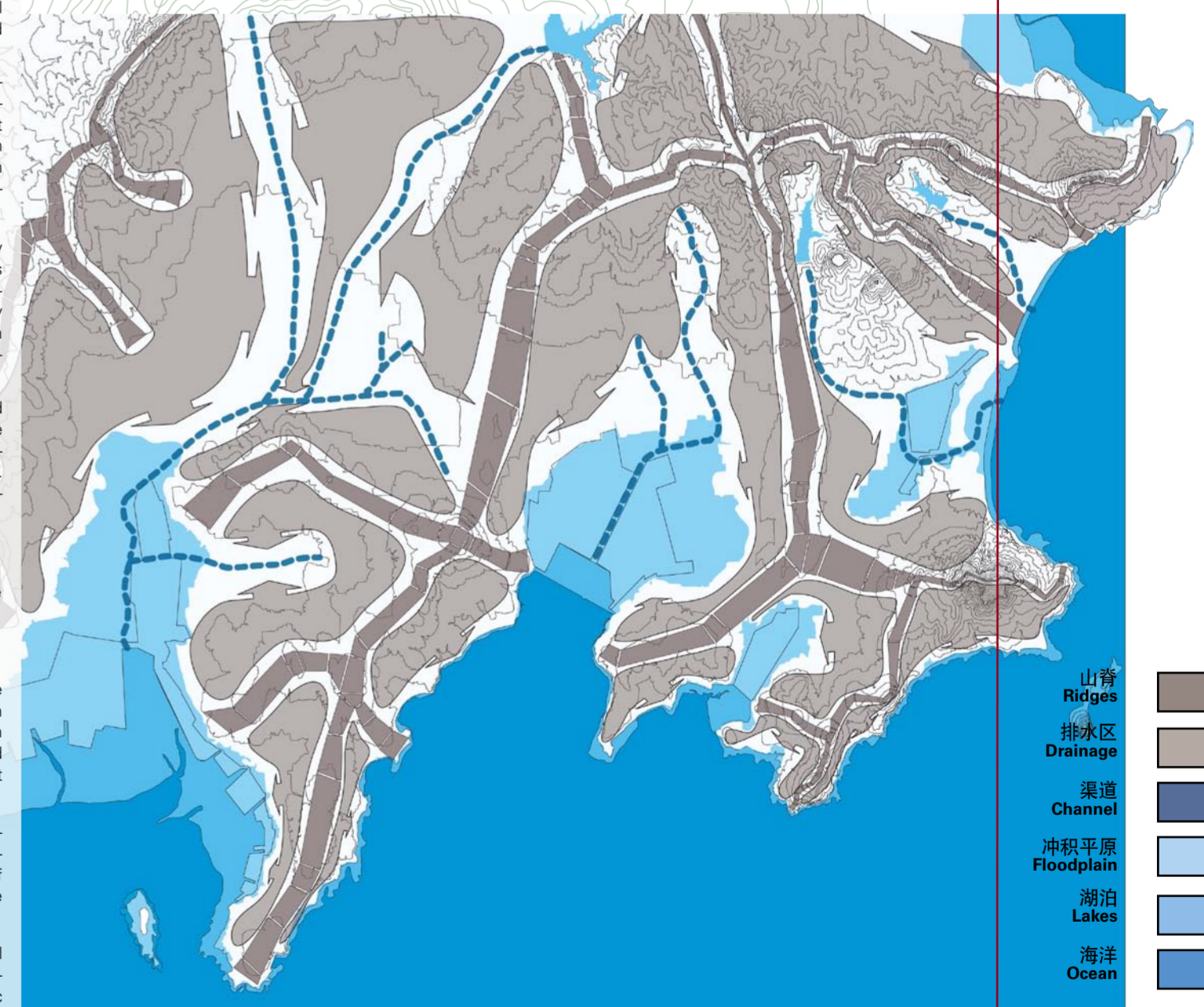
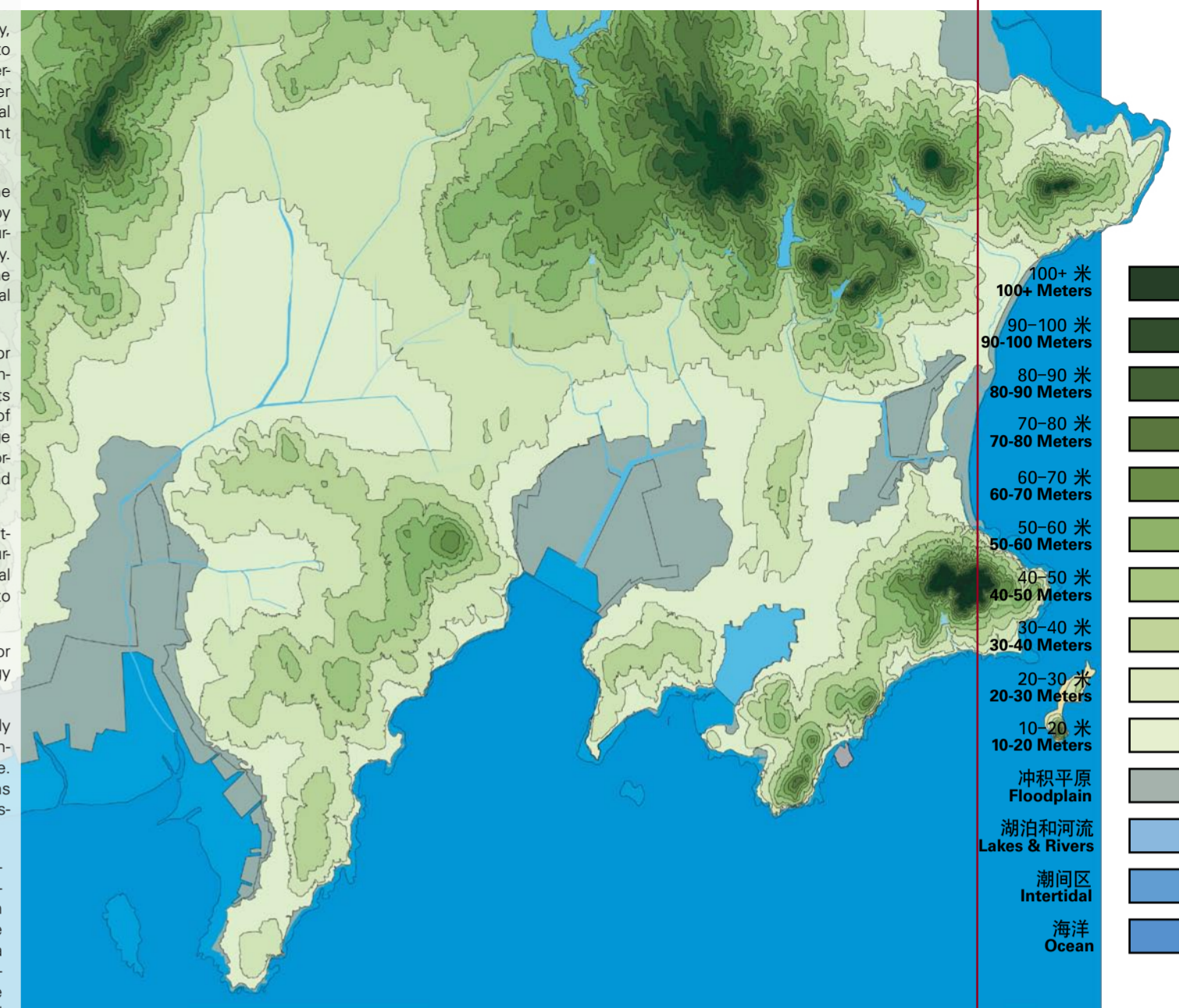
Mountain Dominance: Preserving all mountain areas and other uplands from non-essential development can maximize both economic and ecological potential. We recommend limiting building sites to below the 30-meter topography reference. Combined with other urban growth boundaries, this will maintain the open character of the region for future generations.

Elevation Differential: The benefit of elevation and its potential for views is obvious. Additionally, the grade difference between water sources and water distribution stations provide opportunities for hydroelectric supply, especially when combined with the continuity of water use in domestic, industrial and farm situations.

Natural Drainage: Natural water flows can be used to manage the quality of urban surface water. When organized into green management zones and treated with low-tech bio-filtration methodologies, this allows for greater development, improved water quality, and lower stress on the wastewater treatment plant. These zones also become fine regional public parks.

Wind Advantage: Prevailing winds, from the northeast in winter and the southwest in summer, offer attractive opportunities for wind-power generation. With average wind speeds of over 18 kilometers per hour, wind power becomes a possible option that deserves investigation.

Moderate Climate: The relatively mild climate of this coastal region, when combined with a well conceived and clean ecosystem, can make Lang Ya an extraordinary place for economic development through tourism and industry, as well as being an extraordinary place to live.





85% of the 2020 target population of Lang Ya City group resides in the urban areas north of the Specialty Farmland. It is this population density that creates the critical mass for economic success, and simultaneously allows for eco green land and the spacious character of Lang Ya Tourism Park. Demand for resort and recreational living will expand as the economy grows and developable coastal lands diminish. As the tourism, recreational and leisure benefits are understood, it will be essential to offer appropriate access. It is our intention with the development of Crystal City to have a controlled and practical solution to this demand – a large number of people will have easy access to the natural beauty. But development, which might otherwise destroy that beauty, is contained within the high-density community. Coastal land is a most important and limited resource. It can remain a powerful source of wealth, eco-stability, and aesthetic joy if we consider solutions to preserve it while providing real access.

The population table shows the target population for each urban area in 2020.

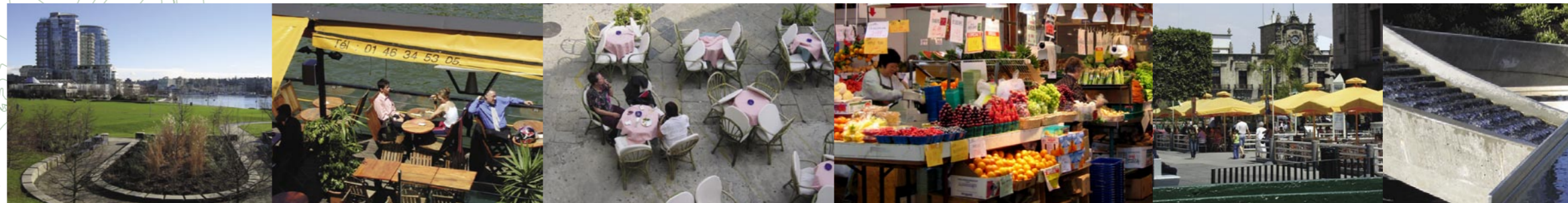
到2020年,琅琊组团内80%的目标人口将在农田区以北的城区居住。这种人口密度是经济发展的重要条件,并同时兼顾琅琊旅游度假区和生态绿地发展,以及保持其空间景观的特点。随着经济的发展,海滨陆角可开发陆地的减少,人们对于休闲娱乐的要求会越来越强烈。当旅游、娱乐和休闲为人们所接受,提供这种休闲娱乐的场所便十分重要。我们总体规划中,规划了一座全新的城市,并称之为水晶城。这座美丽的水晶城将满足大批游客和公众方便地前往风景区和海滩的要求。然而,城区的发展又可以将日益增长的人口密度控制在城区,否则它将破坏我们赖以生存和发展的自然资源和美质。滨海地区的土地是最珍贵的稀有资源,如果我们千方百计地保护它,保持其生态稳定性和景观的秀丽,那么它将始终是个巨大的聚宝盆,提供巨大的经济发展财富。

下表列除了2020年各个市区的目标人口情况。

人口规模和密度	Population & Densities	面积 (平方公里)	人口密度 (每平方公里人数)	目标人口	城镇总人口
		Square km	Population per sq km	Target Population	Town Total Population
1.1	琅琊公园村 Lang Ya Park Village	1.0	5,000	5,000	
1.3	海洋研究所社区 Marine Institute Community	0.4	6,250	2,500	
2.0	水晶城 Crystal City	2.0	15,000	30,000	
3.0	温泉度假村 Health Spa & Resort Village	2.0	3,000	6,000	
3.1	企业旅游村 Entrepreneurial Tourism Village	1.5	6,250	9,400	
3.2	南岸旅游村 South Coast Tourism Village	0.9	6,250	5,600	
4.0a	琅琊镇市中心 Lang Ya Town Central	2.7	15,000	40,500	74,500
4.0b	琅琊镇市区 Lang Ya Town Urban	2.0	10,000	20,000	
4.0c	琅琊镇郊区 Lang Ya Town Suburban	2.0	7,000	14,000	
5.3	南头旅游村 South Point Village	1.5	5,000	7,500	
6.0a	泊里镇市中心 Boli Central	4.3	15,000	64,500	97,300
6.0b	泊里镇市区 Boli Urban	2.4	10,000	24,000	
6.0c	泊里镇郊区 Boli Suburban	1.4	6,250	8,800	
	市区人口总计 Total Urban Population	24	9,900	237,800	
	重工业总人口 Heavy & Medium Industry	6			
	轻工业总人口 Light & Medium Industry	8			
	开发区总面积 Total Developed Area	38			
	琅琊规划组团总面积 Lang Ya Planning Area	100	2,378		

现在世界范围内都流行新城市主义。新城市主义之所以盛行是因为他一贯主张社区内传统的步行街和步行文化。虽然权力、利益、文化认同等多方面复杂因素对一个地区的影响巨大,但步行街和社区之间的交流和连接的影响是不可忽视的。社区不再是一个简单的大商贸区,它需要有当地特色的和文化认同感的社区服务。一个成功的社区包括其美丽的自然边界、社区中心、活动中心、不同层次和不同款式的房子、交通便利、娱乐方便——所有这些都是优秀社区的重要组成。人们希望社区尊敬、期望和认可他们的创造性,而不仅是拥有一个物资的空间。现代设计必须体现社区和人的追求,要有社区的认同感。一个社区所拥有的艺术、建筑、象征物及其他设计标志可以生动地体现出其持续高涨的发展热忱和文化。运用这些进行城市规划的原则所设计的社区,再加上绿色城市设计和超前思维的设计理念,一个成功的新城市的规划蓝图肯定是光彩夺目的。

New urbanism is reflected in the vital and prosperous urban areas from around the world. What makes such urbanism successful is the traditional belief in walkable neighborhoods. Even where the complexities of power, profit and identity affect such places, the consistent thread is pedestrian and close-knit neighborhoods. Rather than a single commercial and retail district, there needs to be distinct neighborhood services with a local identity. Edge, center, gathering places, multiple scale and different types of housing, easy access to transportation and recreation - all shape the components of successful neighborhoods. It is understood that people respect, desire and value creativity in their living environment, not just the manufacturing of commodity space. Contemporary design must express a district's and its people's aspirations; then it becomes a neighborhood with an identity. Such a district's urban stew of art, architecture, symbols and other design elements can suggest that culture needs to remain a reliable catalyst for development. When these urban planning principles for successful neighborhoods are combined with green urbanism, forward-thinking successful new cities result!



城市发展:拓展边界、高度、建筑限制及社区发展

Urban Centers: Growth Boundaries, Height and Building Limits and Neighborhood development

对所有成功的城市规划而言,确定市区扩展边界是非常关键的,像琅琊台组团这种快速发展的地区尤其如此。城市发展边界的确定,一方面可以使现有的土地增值,而得以充分利用,另一方面又可以限制对其它土地类型的侵占,确保农业、旅游、娱乐、自然风光、水和空气质量管理及生态保护区等用地不为城市发展所吞并。只要可能,城市和沿海村庄应限制在北部地区的山脚下或海滨陆角的北端,而不应建在陡坡、山顶或海滨陆角上。

根据我们的实地调查,我们的规划确定所有的建筑不能高于琅琊台的海拔高度。这是为了维护大山的美丽景观,确保琅琊台作为整个地区最重要的象征和最突出的标记。为此,我们建议任何建筑物高度不能超过海拔一百米,这样可以充分突显这个地区地形的起伏。这个高度限制不是指建筑物本身从地面的高度,而是绝对海拔高度。当然,历史建筑、标志性建筑和其他旅游设施建筑可以例外。此外,在海拔30米以上的地区也不应再搞建筑。冲积平原上我们没有规划任何建筑,所有的只是一望无际的农田和广阔的大地。

在拟定总体布局时,我们仔细考虑了社区的自然边界问题。社区边界的巧妙设置,会加强社区居民的归属感和认同感。城市布局的功力与经验体现在对其自然边界的定位上。比如大海和沙滩,山脉和风景,空旷的公园,热闹的城市广场,机关单位,以及社区间的公共交通等,都是我们勾画城市特征线条。而市区的地形、水面、和各种景点,则塑造了城市的整体形象,是一个城市区别于全体城市的重要标志。另外,我们还必须非常谨慎的对待城市标志性建筑。如作为城市权力中心和城市象征的市府大楼及政府建筑群,它是整个城市文化和文明的象征。这种标志性建筑必须具有壮观的景色和特别的建筑风格。有些历史建筑、重要的文化建筑和其他标志性旅游设施建筑可以安排在城市拓展边界之外,保持保护的活力和多样性。一些具有历史和人文景观意义的小村庄,应得到妥善保护及利用,它不但可以促进旅游业发展,并保持了这个地区的特征和多样性。琅琊台组团的规划就是遵循了这些原则,严格清楚地确定了城市建设的拓展边界、突出城市功能团的线条、巧妙勾画社区的自然边界、谨慎地塑造了城市的标志性建筑,从而,构造一个全新的城市整体形象。

Urban growth boundaries are essential to any successful city planning effort, especially where rapid development is expected, like that of Lang Ya City Group. Such boundaries are established to offer both a higher quality use of developed land and to limit the consumption of valuable land for other resources: farming, tourism, recreation, scenic beauty, water and air quality management, and bio eco reserves. Where possible, cities and coastal villages are nested north into foothills or coastal headlands, and not on steep slopes, summits or headlands.

It is clear from our investigation that no building structure should be higher than Lang Ya Tai, to preserve the beauty of the mountain, and to ensure that Lang Ya Tai remains the most important symbol in the area — the pre-eminent brand of Lang Ya. We recommend that no buildings be built with a height exceeding 100-meters above sea level, thus providing a distinct contrast to the regional topography. Height limits are not from the ground of the building, but are the absolute altitude. Of course, historic, symbolic, and other tourism structures may be an exception. In addition, building construction is not allowed in areas where the ground is higher than 30-meters above sea level. No building construction is planned in the identified flood plains — only farmland and open space.

The master plan has been developed with careful consideration of Edges. Edges help set the bounds of neighborhoods where a community can feel engaged and connected to the place they live. The energy and quality of experience in city plans comes from the edges: the sea and its beaches, mountains and the views, parks as open space, active city squares, institutional lands with social activities, and neighborhoods transitioning one to the next. We can outline the character and integrity where topography, watercourses, and views are considered important, and begin to establish the branding for the City Group. Exceptions should always be taken carefully; prominent City Hall and government buildings are good reasons, within city boundaries, for special exemptions that promote cultural and civic symbols. These symbols should have spectacular views and status. Also, historic, culturally significant and recreational structures can be carefully integrated outside the growth boundaries for vitality and diversity to the planning program. Small village preservation and adaptive reuse in specialty areas will benefit tourism and maintain the character and diversity of the region. Within these guidelines, our plan for Lang Ya City Group strongly defines bold and clear edges for experience and for growth.

琅琊旅游公园的发展潜力及价值对于琅琊组团的未来发展十分重要。最主要的景点包括琅琊台的历史遗迹、群山的自然美景及它与大海近邻的优势。此地交通便利,可以大力发展娱乐和教育观光旅游业。琅琊旅游公园的群山托着大海边具有滨海古典的美,长而优雅沙滩和突兀的礁石处处可见。我们认为,旅游区的设置必须与自然融为一体,并有助于当地渔业经济和教育经济的发展。在公园扩建时,应特别注意多建有历史象征意义的建筑;可以通过限制建筑物高度及城区扩展范围的方法,使得周围的村庄、服务设施、娱乐中心、娱乐设施建筑在视觉上与历史及自然环境相协调。

The potential and value of this district is of great importance for Lang Ya City Group's future. The most significant aspects are those based on the historic archeology of Lang Ya Tai and the natural beauty of the mountains and their proximity to the sea. Recreational access and serious educational tourism opportunities abound. The setting boasts the classic coastal beauty of marine headlands, long elegant beaches and rocky outcrops. The tourist areas must be integrated with nature while contributing to a fishing and education-driven local economy. As the park develops, it is essential that only structures of historic symbolism have predominance. Such elements as supporting villages, nearby services, entertainment centers, recreational architecture and facilities need to be visually subordinate to the history and natural beauty, through height restrictions and urban growth boundaries.



焦点 1: 琅琊旅游公园

Focus 1: Lang Ya Tourism Park

1.0 琅琊台

琅琊台是琅琊组团的中心和标志。作为一个“活公园”,它显示了这个地区的繁荣。公园以步行游览为主,进口处设公园管理办公室、纪念品店、旅游服务商店。北部入口靠近滨海公路出口,有一个消防站。南部入口靠近琅琊公园的旅游区。为限制园内车辆,游人入园游览需附少量费用,而市民可以免费入园游览。公园入口处及旅游服务区都设有停车场。琅琊台的东部可以俯瞰大海,此处只修建自行车小道和游人步行道(可行驶救护车)。周围群山保持不动,博物馆和纪念品店需加以修缮。整个园区要与整个区域的交通系统相连。公园内现有的一些建筑物需拆除或改建,以保持整体风格的一致。琅琊台有一种永恒的气质,通过精心开发,我们可以使这种气质更加突显。

1.0 Lang Ya Tai

Lang Ya Tai is the central feature and defining symbol of Lang Ya. As a "living park," it celebrates the success of the area. The park experience focuses on pedestrians. Park entrances include park administration offices, gift shops and tourism services. The north entrance is near a Coastal Road exit, and has a fire station. The south entrance is near the tourism area of Lang Ya Park Village. To limit automobile traffic in the park, visitors pay a small fee, while residents may enter at no charge. Parking is available at park entrances and tourism services areas. The east side of Lang Ya Tai, overlooking the sea, has only bicycle trails and pedestrian walkways (with accommodations for emergency vehicles). Existing monuments remain undisturbed, while the museum and gift shops are enhanced, and the area is integrated into the region's transportation network. Some existing buildings within the park area must either be removed or remodeled to be consistent with the program. Lang Ya Tai has a quality of timelessness, which can be enhanced by careful development.

1.1 琅琊公园村

这将是一个主要的渔业中心,可建设一个用于商务渔船捕捞和钓鱼运动的大码头。渔村在琅琊公园区内,其土地使用类型和建筑模式应与公园相一致,并需要对城区再加以绿化。渔村应给人以愉快好玩的感觉,有如加州的山沙丽多Sausalito市、佛罗里达州的西匙Keywest城、缅因州的肯尼邦波特Kennebunkport市、意大利的清珂佛萨Chingquefersa市和希腊的波多河丽Porto Heli市的特点。艺术家可以来此居住,并小规模制作艺术品。游人在此可以买到有趣的手工作品,并可以亲眼看到它的制作过程。娱乐设施包括博物馆、水族馆、旅游表演馆、饭店,本地区渔业历史展览馆及一些具有本地历史事件的匾额和碑刻,以教育人们。这里还应设立一个旅游服务培训中心,制定旅游服务标准、培训人员,让他们充分体现琅琊组团旅游业的精神风貌。

1.1 Lang Ya Park Village

This will be a major fishing center, and will offer a large harbor for commercial fishing boats as well as for sports fishing. The village is considered within the park boundary, so zoning and building codes will follow park standards and will require a "greening" of the city. The village will have a feeling of fun and playfulness, with attributes represented by towns such as Sausalito, California, Key West, Florida, Kennebunkport, Maine, Chingquefersa, Italy, and Porto Heli, Greece. It will support artists, entrepreneurial businesses such as bed and breakfasts, and small-scale artisan manufacturing. Tourists will be able to buy interesting craft items and to also see how they are made. Amenities will include museums, an aquarium, tourist shows, restaurants, historical references to fishing in the area, and educational plaques describing the local historic events. The Tourism Training Center will establish standards and train employees to represent Lang Ya City Group in the tourism industry.

我们规划一条小马路把渔村和附近岛屿连接起来,行人和自行车(及救护车),也可能有电车,可以在小马路上行驶;但机动车辆则不允许上到小岛上。花上一个下午在小岛上漫步,一边呼吸着咸咸的空气,一边欣赏着独特的风景,这将是非常惬意的事。

A small roadway will connect the village to the nearby island, and will support pedestrian and bicycle traffic (and emergency vehicles), and perhaps a tram. Automobiles will not be allowed on the island. The island is a wonderful way to spend an afternoon wandering and savoring the unique views and salt air.

琅琊公园村的东面是一个历史码头遗迹。公元前219年,秦始皇在这个地方把成百上千的童男童女送往日本。这个码头在视觉上又实际上与琅琊台相连。游人可以从这个码头一直走到山顶。在了解了这个地区的历史后,游人可以参观小渔村,参加其中的许多娱乐活动。

To the east of the village is the historic port where the first Qing emperor dispatched thousands of boys and girls to Japan in 219 B.C. This port will be connected, both visually and physically to Lang Ya Tai, allowing visitors to walk from the port to the top of the mountain. After learning of the history of the area, tourists will be able to enjoy the facilities of a working fishing village that also provides abundant tourist amenities.

(商业渔业、钓鱼运动、历史景点,艺术社区、艺术加工、游客娱乐、旅游服务、食宿、旅游培训中心。目标人口:6,300)

(Commercial fishing, sports fishing, historical attractions, art community, artisan industry, tourist amenities, tourism services and residences, bed and breakfast lodging, Tourism Training Center. Target population: 6,300.)



从滨海公路上的车辆出口可以直接前往琅琊公园。应该精心规划公共交通系统以满足大批游客的交通,从而减少出现长时间交通阻塞的情况。优先考虑的交通系统应该是轻轨列车、有轨电车、或少量旅游客车,为便于论述,以下简称之“轻轨”。轻轨与其他地区的交通系统相连接,进一步完善了这一区的交通网络。人们可以从这里很方便的前往青岛及国内外其它地方。优先考虑的公共交通系统必须以功能好效率高为目的,便于人们在城区和公园等地多方面得以美的享受。作为交通系统的补充,可多建人行道和自行车道,人们可以更为休闲的前往公园,而不会造成公路的过度拥挤和产生拥挤的感觉。用于建设公园的土地面积要足够大,以满足琅琊组团长期发展的需要。由于公园临近生态保护区、农田及工业区,本地区的旅游潜力又得以加强。

Easy automobile access is provided to the park through limited vehicular exits from the Coastal Road. To consider and minimize long-term traffic congestion, a well-planned public transit network will move great numbers of people. This right-of-way based transit can be light rail, tram or limited guide-way buses - for simplicity, the rest of this book refers to "light rail". Links to the greater regional transportation systems support the success of the local network, while providing efficient connections with Qingdao, national and international destinations. These mass-transit rights-of-way must be functional and efficient while providing diverse and beautiful experiences in the Park and urban area. Supplementing the larger scale transportation systems is an abundance of walkways and bikeways that make the whole park accessible in a more relaxed way without the impression of crowding or over-use. The amount of land designated for the Park is necessary to accommodate the long-range growth in the Lang Ya City Group. The Park's proximity to adjoining ecological and productive lands for farming and industry extend the potential of the tourism area.



1.2 大众旅游社区

这是一个旅游娱乐和文化教育的中心。附近的龙湾沙滩可保护利用,作为公共娱乐场地;沙滩上有游泳及其他娱乐设施。这儿全年提供文化教育和娱乐服务。例如,可以利用这个公园举行各种多元文化教育展,分别展示中国和日本的风俗传统;附近,可建造一些历史村,再现中国人在公元前219年可能是如何生活的。这些公园有可能成为游人全年经常光顾的地方。另外,可以通过在园内设置韩国村、韩国园,显示黄海文化,从而进一步突出中日两国在历史上的联系和中、日、韩人民的友好纽带。

旅游活动应有广泛的社会、经济吸引力。这将进一步促进经济的发展。随着中国中产阶级人数的增多,象琅琊这样的度假中心将成为巨大的经济发展的驱动力量。

(旅游服务、旅游娱乐、沙滩活动、博物馆、花园、旅游教育小亭子)

1.3 海洋研究所社区

海洋研究所社区的重点在于建设一个海洋生物和海滨保护的研究教育中心。它可以与青岛或北京某所主要大学合作,为该中心及其服务的社会带来研究便利和经济利益。相邻的胡家山村将沿着为大学和研究功能配套的方向发展。这个村也将设置小旅馆,向游人提供食宿服务。战略上而言,海洋研究中心应设在海边,靠近海边沼泽地、新建淡水湖和渔业养殖场。研究成果可以支持附近渔场,高科技养鱼村(山东头)和琅琊旅游村。

(研究中心,教育,旅游中心,可居住,目标人口2,500)

焦点 1: 琅琊旅游公园

Focus 1: Lang Ya Tourism Park

1.4 山海公园

山海公园是个风景秀丽的区域,应设为省级公园。在保护其重要的生态系统的同时,可方便大众对海滩的利用。山海公园内部原始自然风光无限美。作为公园对土地影响少,保持了地域的原野和自然,提高了公园的吸引力。山海公园创造了一个绿色长廊,把车轮山度假区和水晶城及其它密集人口社区隔开。公园会吸引无数的游人,无论是从林间穿行,或在绿色群山中或滨海小路上漫步,或者在小河边垂钓,或在林间野餐,在沙滩上闲逛,抑或在蓝色的大海里畅游,都是大自然赐给琅琊的无穷的快乐。

(野餐、徒步、边欣赏风景边驾驶、游泳)

1.5 车轮山度假区

车轮山度假区这一五星级的度假中心将以其清代建筑风格迎接四面八方的投资者和游客。白天从这个拥有300-400个床位的度假中心望去,可看到度假区海边的高尔夫球场、龙湾和琅琊台;夜晚则可享受水晶城璀璨的灯光。这里山与海的连接景色优美、充满生机,投资机会很多。人们可搭乘往返客车方便地到水晶城购物、娱乐,或者转乘大区交通系统前往其它地方。游人可以从青岛或机场乘高速快艇先到水晶城,然后再只需花上几分钟,便可到达车轮山度假中心。

这个地区将建设琅琊组团内两个高尔夫球场之一。靠近温泉度假区的高尔夫球场将向公众开放。但车轮山度假中心的高尔夫球场只对度假中心的客人、俱乐部会员和职业球员开放。由于这个球场靠近海边,交通便利,它具有举行国际高尔夫球赛的潜力。它也在海滨创造了新的美感视觉和生态效果。

为使这个度假中心升值并保持其独立性,应通过投标仅确定一家公司进行开发。如在开发前期招标,其成果可以借助来开发琅琊台旅游区。

(旅馆 温泉 专用旅游服务 世界级高尔夫球场)

1.6 高技术渔村(山东头)

有了海洋研究机构的支持,这个村将从事可持续海洋渔业、商业养殖、捕捞。这个区在规划范围外,我们的总体规划没有包括这个村的详细内容。

(滨海渔场、商业渔业捕捞、渔民住宅、目标人口2,500)

1.2 Affordable Tourism Community

This is a center for tourist entertainment and cultural education. Nearby dragon beach is preserved for public use and enjoyment. Beach facilities include watercraft, swimming, and other recreational activities. Year-round tourist destination facilities will offer cultural education as well as entertainment. For example, a cross-cultural education exhibit could accompany a pair of gardens illustrating Chinese and Japanese traditions; nearby reproduction villages show historical examples of how Chinese and Japanese peoples might have lived in 219 BC. The gardens have the added potential to be the primary year-round tourist destination of the local community. To contrast the Chinese-Japanese historic connection an example of Korean villages and gardens could fill out the Yellow Sea Cultures.

Tourism activities should be designed to have broad socio-economic appeal. This will speed achievement of critical mass for economic activity. As the middle class Chinese population grows, vacation areas such as this will become a significant economic driver.

(Tourism services, tourist entertainment, beach activity, museums, gardens, tourist educational kiosks.)

1.3 Marine Institute Community

This community is focused on a research and education center for marine biology and coastal preservation. Its association with a major university institution in Qingdao or Beijing will provide research and economic benefits to the institutions and to the communities that they serve. The adjacent village (Hujiaoshan) will develop to support university and research functions. This village will be also support visitors in small Inns and Bed & Breakfast accommodations. The Marine Institute is strategically located on the sea, near saltwater marshes, a new fresh water lake, and production fish farming. Research will support the nearby fish farms, High Technology Fishing Village (Shandongtou), and Lang Ya Park Village.

(Research institute, education, tourism center, support residences. Target population: 2,500.)

1.4 Mountain to Sea Park

This scenic provincial park uses its existing natural beauty and offers easy beach access while preserving the essential eco-system; such low-impact management of the land, while retaining a wilderness character, enhances the park. It creates a large green belt that connects the mountains to the sea, while separating the Chelun Mountain Resort from Crystal City and other dense uses. Park facilities will invite the public to take a peaceful woodland drive, hike along green mountain and coastal trails, fish in the rivers, enjoy picnics among the trees, walk along the beautiful sand beaches, and swim in the ocean.

(Picnicking, hiking, scenic drive, swimming.)

1.5 Chelun Mountain Resort

This five star resort, in the Qing style, will welcome and entertain investors and international visitors. Daytime views from the 300-400 bed hotel include a world class golf course along the coast, Dragon Bay, and Lang Ya Tai, while night views reveal the sparkling appeal of Crystal City. The linkage between mountains and sea will be strong, and the opportunities for investment will be palpable. A shuttle provides efficient access to Crystal City for shopping and entertainment, as well as a link to the superb regional transit system. A visitor could arrive from Qingdao or the airport via high-speed ferry to Crystal City, and then arrive at the Chelun Mountain Resort only minutes later.

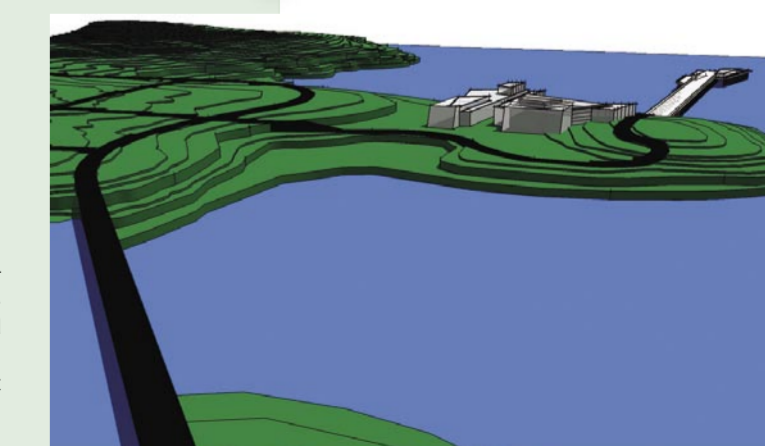
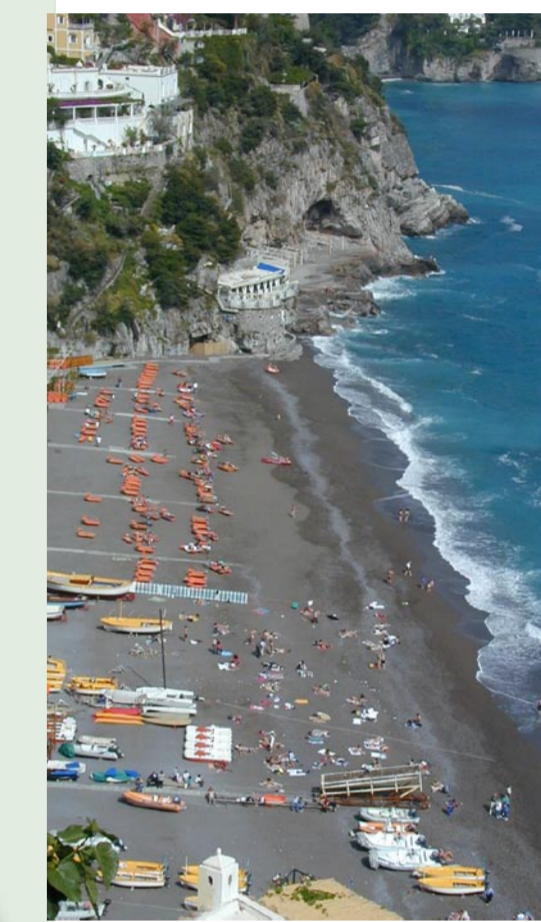
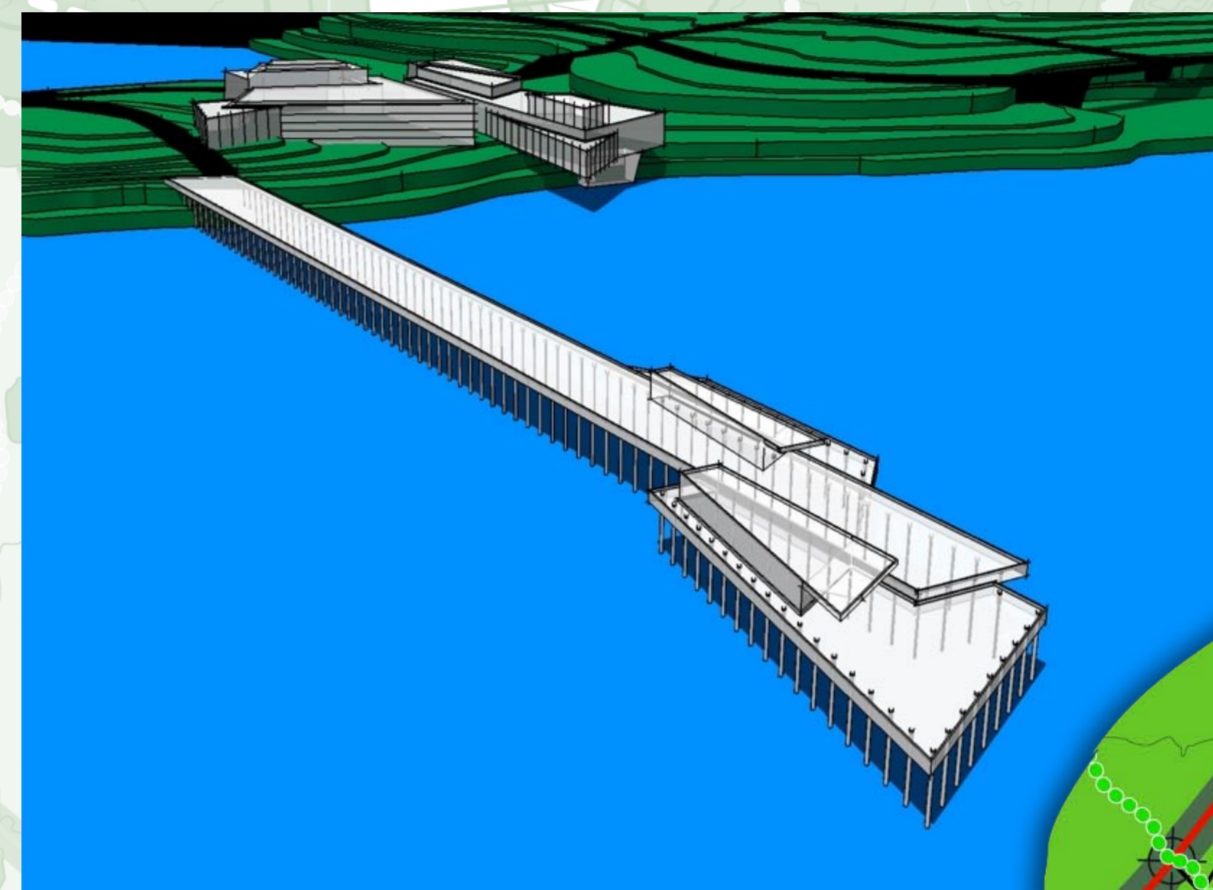
This area will host one of two golf resorts in the Lang Ya Tai City Group. The golf course near the Health Spa Community will be open to the public, and the course at Chelun Mountain Resort will be an exclusive club for guests of the resort, for club members, and for professional golfers. With its coastal views and good transportation access, this golf course has potential to host an international golf championship. The golf course also creates low visual and ecological impact on the coast.

To increase the value and perceived exclusivity of this resort, development should be open to only one company via a bidding process. If done early in the development process, proceeds from the bid can be used to develop the Lang Ya Tai Tourism Zone.

1.6 High Technology Fishing Village (Shandongtou)

Assisted through research at the Marine Institute, this village will implement commercial production of sustainable-farmed and ocean fisheries. This is outside the planning area, and we have not included details of this village in our master plan.

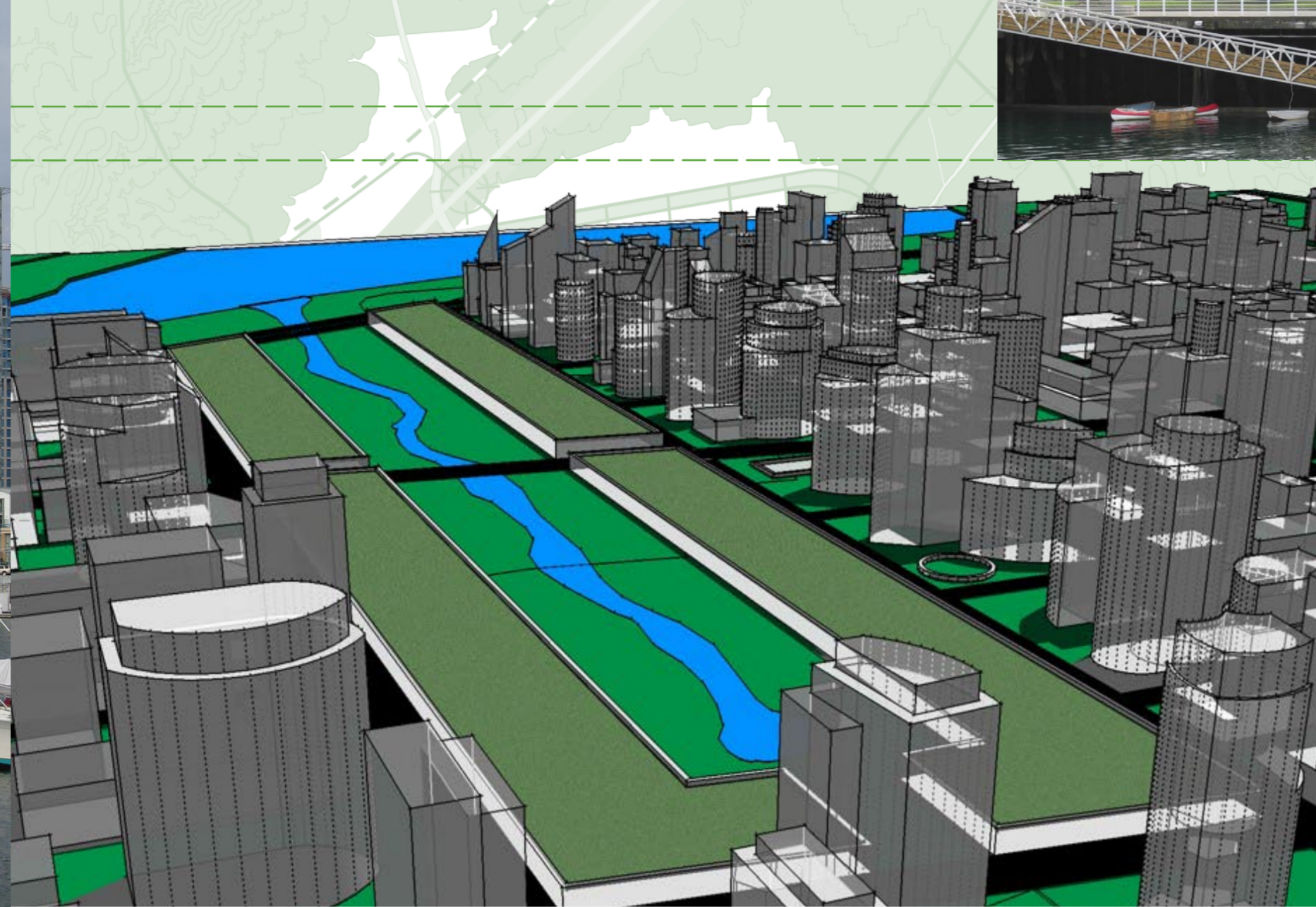
(Coastal fish farms, commercial fishing, fisherman residences. Target population: 2,500.)



当游人沿滨海大道从北部前往琅琊台时,他们会经过一个半山腰,在那儿,他们会为眼前山海相接的壮观景色而感叹。琅琊台从龙湾长飘动的沙滩尽头显现。因此,我们必须精心地进行限制性区划和空间管理,以及限制建筑物高度,以保持这个一览无余的景色的自然美。让它永远保持这种广袤和自然,以促进旅游经济发展。

When visitors approach from the north on the new Coastal Road, they pass over a mountain saddle, and are then awed by the vision of the connection of mountains to sea; Lang Ya Tai appears across the long flowing sands of Dragon Bay. The unobstructed natural beauty of the area can be appreciated because of careful restrictive zoning, open space management and building height restrictions. It then can indefinitely appear open and natural while providing the economic engine for significant growth.





焦点 2: 水晶城 Focus 2: Crystal City

2.0 水晶城:

水晶城以半透明绿色玻璃造型的住宅楼及宾馆大厦来显示这个休闲城市和旅游圣地的无比典雅。这是一个人们所向往的生活、工作和娱乐的都市。我们建议主导建筑风格为绿色、节能、整洁的玻璃造型(不是反光的玻璃镜)。这个晶莹的花园城市坐落在北部群山之中,可非常便利地通往滨海公路、琅琊镇、附近山脉和龙湾。从水晶城,人们可以全方位欣赏到各种壮观的景点,南方有古老的琅琊台,东方有开阔的龙湾和大海,西方有风景如画的农田。四面八方都可以感觉到天地之开阔!在这个生机勃勃的地方,我们的规划考虑了高密度国际居住区和宾馆区,提供丰富的娱乐资源和一流的旅游服务。这是一个建设剧院、画廊、俱乐部、商店、饭店、游艇和帆船俱乐部和其它休闲设施的理想地方!

在这个城市的中心,我们设计了长达一公里的三层商贸长廊——“琅琊商城”,中间一连串小公园连山接海,通往琅琊台。我们在这个花园商城中设计了弯弯曲曲的潺潺流水,象征龙的祥气,以彰显龙湾的波浪之美。商城也是琅琊组团轻轨终点站。人们可以乘坐轻轨方便地前往公园、市区、工业区及其他重要地区。水晶城的独特性由它与琅琊台历史公园之间的微妙距离、各种丰富的旅游活动和方便的交通而进一步突显。

这是一个独特的国际海滨度假中心,它有着绿化良好的公共大道,有通往群山及公园的小路,并且有着直通南面的旅游码头。水晶城将是一个国际投资热点城市,这是城市经济发展的源泉。一旦青岛通往此地的滨海公路贯通,这个地方的增长将有足够的驱动力加速城市发展。我们认为水晶城可建设各种公寓和住宅区,满足3万居民的居住,还可以建造各种出租公寓、酒店、度假村,容纳3万游客。由此到2020年,这个地区可以容纳6万人。

(投资公寓楼,国际商务楼,商城,艺术画廊,剧院,俱乐部,饭店,游艇,帆船等旅游服务设施。)

2.0 Crystal City:

Transparent green-glass residential and hotel towers mark the sophisticated elegance of this lifestyle-oriented urban and tourism Mecca — a Hip live-work-play zone. We recommend concrete structures with clear green-colored energy-efficient glass (no mirror glass) as the dominant building style. This sparkling garden city is nestled into the northern mountains, with excellent access to the Coastal Road, Lang Ya Town, the nearby mountains and Dragon Bay. The city enjoys spectacular and panoramic views south to Historic Lang Ya Tai, east to the expanse of Dragon Bay and the sea, south and west to scenic farmlands — a real perception of open lands in all directions! This dynamic place is planned with intentionally dense residential and hotel areas, and with abundant entertainment and tourism services. It is the home of theaters, galleries, clubs, shopping, restaurants, boating and sailing clubs, and other lifestyle experiences.

The centerpiece of the city is a kilometer-long three-story Shopping and Service Gallery, “The mall at Lang Ya,” with a continuous park median connecting the mountains to the sea, oriented to Lang Ya Tai. The watercourse within this garden retail zone will flow in the shape of a Dragon, thus celebrating the beauty of the waves of Dragon Bay. The Mall acts as the terminus for the Lang Ya City Group light rail service; the light rail allows for easy public transit to the tourism parks, urban zones, and industrial areas as well as connections to the greater region. Exclusivity of Crystal City is enhanced by its subtle separation from the Historic Lang Ya Tai Park and the general tourism activities, while providing efficient access to those areas.

This is a unique international coastal resort neighborhood with generous public landscaped streets, with mountain and park trails, and with a sweeping south-facing promenade on the tourist harbor. Crystal City is an investment zone, a powerful source for economic development contained within urban growth boundaries. There is enough density to facilitate rapid growth once the Coastal Road opens from Qingdao. We anticipate this unique neighborhood to support 30,000 people in owner condominiums and working resident apartments, offering another 30,000 visitors accommodations through apartment rentals and hotel rooms. Thus for the 2020 time period this zone accommodates a total of 60,000 people.

(Investment condominiums, international business services, high-end retail, art galleries, theaters, clubs, restaurants, boating, sailing, and tourism services. Target population: 30,000 with additional accommodation for 30,000 visitors.)

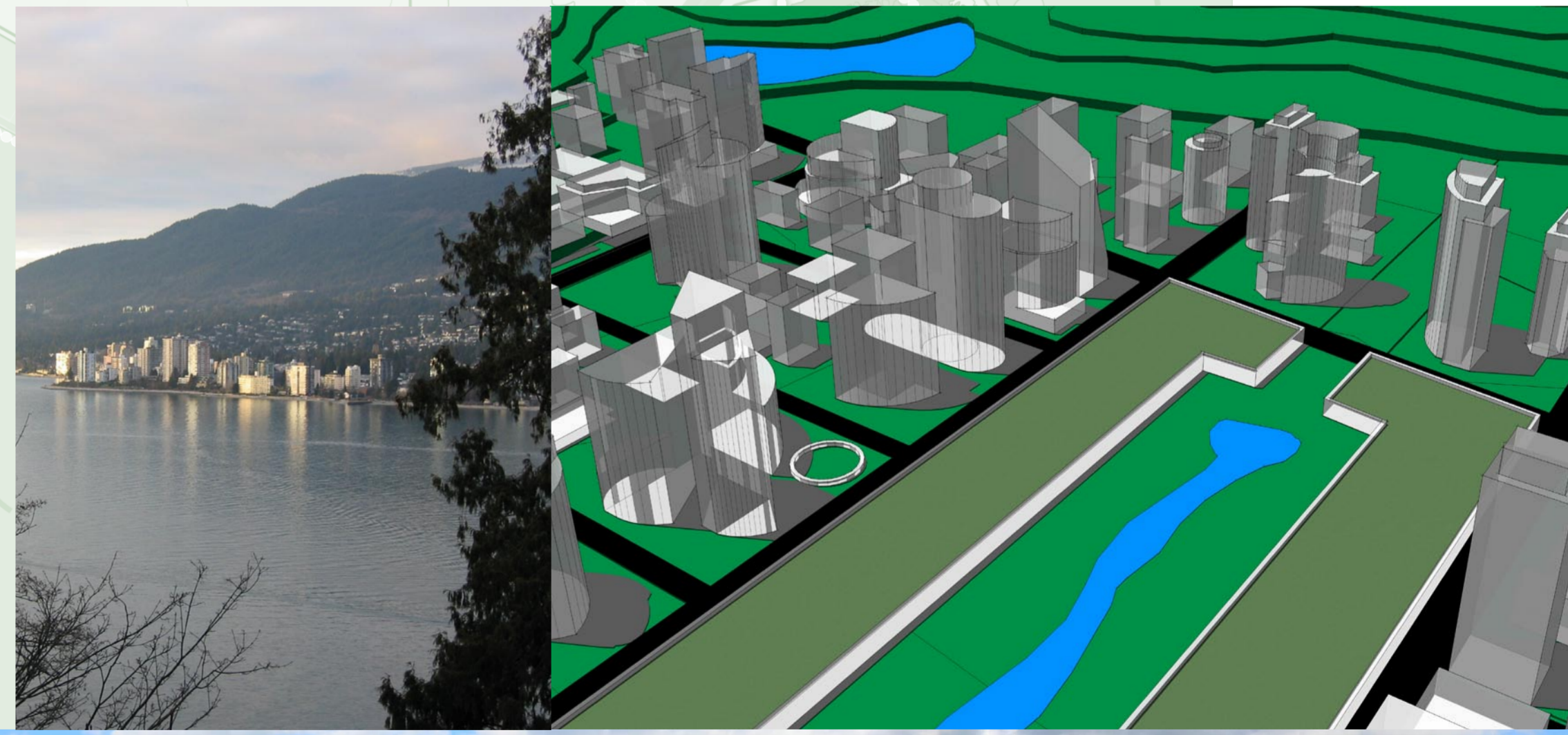
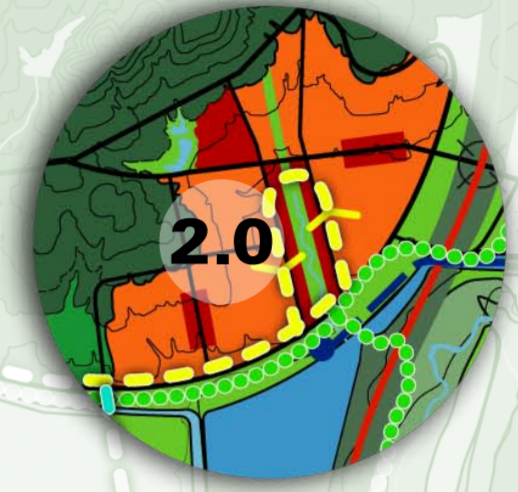


2.1 小游艇港湾

水晶城的南部是一个人造海水港湾。这个港湾可集中提供海洋旅游服务、帆船游艇培训设施、游人轮渡码头、游船、私人游艇停泊及游艇娱乐服务。娱乐活动包括:钓鱼、潜水、帆船运动、小皮艇、独木舟、帆船及摩托艇运动。由于距离水晶城较近,游艇码头是一处非常好的公共娱乐场所。它由水晶城支持并从中受益。一个可行的方案是用港湾清理出的淤泥垫高城区,以获得俯视滨海大道的视野。滨海大道与港湾入口相交处应架设一座桥梁,以方便游艇通过。另需第二座桥提供给自行车和行人专用,连接琅琊商城、龙湾沙滩和琅琊台。

2.1 Small Boat Harbor:

Just south of Crystal City is a man-made salt-water yacht harbor; this boat basin provides for a concentration of marine services: sailing and boat training facilities, a passenger ferry dock, tour boats, a marina for private yachts, and access to recreational boating services. Recreational usage could include: sport fishing, water skiing, parasailing, kayaking, canoeing, sailing and motorboat rentals. The boat harbor is a valuable public amenity, both supporting and benefiting from its close association to Crystal City. A practical opportunity comes from using the dredging fill from the new harbor to elevate the city zone for maximum views above the coastal highway. The coastal highway will require a bridge over the harbor inlet, constructed for the passage of sailboats. A second bridge is for bicycle and pedestrian use, connecting the “Lang Ya Park Mall” with Dragon Bay Beach and Lang Ya Tai.



所有成功的经济发展,都来自于根据不同的设施和地点的资源,满足不同的需求。琅琊公园是一个主要的地区、国家、或国际级的景点,各种阶层的人都可以到此休闲,寻幽访古,学习及体验生活。水晶城提供了城市丰富多彩生活的体验,它也是一片投资的热土,提供了黄金地段房地产的投资良机。滨海温泉和高尔夫度假区提供了另一种更加激情和吸引人的娱乐场所。

The success in any economic development comes from recognizing the value of different facilities and places to serve differing requirements. The Lang Ya Park is seen as a major regional, national and international attraction, where a multitude of people can come for recreation, history, learning and experience. Crystal City offers the urban alternative of intense lifestyle experience and exciting opportunities for investment housing in that prime and hip location. The Coastal Spa and Golf resort zone offers an alternative to the other more intense tourist experiences.



焦点 3: 海滨温泉和高尔夫度假区 Focus 3: Coastal Spa and Golf Resort



3.0 保健温泉和海滨度假村(蒲湾)

在滨海开发区的这个地方,设有几个环保型的保健温泉度假中心,供人们疗养休息。这个区偏重于放松和休闲。一个一流的公共高尔夫公园和培训中心将闻名半岛。这是一个令人愉快的地方。附近居民和游客有机会在这里体验高尔夫运动的魅力。人们也可以沿海边的木栈道或自行车道漫游,放松身心,调养身体。这个城市没有超过三层的建筑,它的特点是令人振奋的绿色大自然。所有的街道旁、人行道边、公园都铺有软软的草坪,种有婆娑的绿树和美丽的花儿。到这里既舒服又享受。附近的度假村里的居民悠然享受着海滨的舒适。这里没有高楼大厦。这些一流的居住地、旅游天堂、保健温泉都受益于周围良好的环境、公共高尔夫球场及其他旅游服务。这个地区亲密的气氛和稀疏的建筑具有加州滨海小镇的特点,很像山塔巴布 Santa Barbara 镇。这个镇设计时有意把温泉建在山顶上,并配备了保健疗养服务的设施。我们设计的温泉建筑朝南而建,考虑生态和环境的综合效应,给人们一种轻松愉快而又清纯的感觉。整个琅琊组团的规划展示当代绿色设计理念,并提供最优化可持续发展的前景。这个村犹如一个独特的小宇宙,集聚了组团绿色设计的理念,充分体现了组团内对都市发展和旅游业开发的最佳经济利益的追求。

(保健温泉,高档次住宅区,旅游服务,公共高尔夫球场目标人口:6,000)

3.0 Health Spa and Resort Coastal Village (Puwan)

In this area of coastal development, several environmentally focused Health Spa Resorts cater to healing and rejuvenation. Activities are directed to a relaxing and rehabilitation lifestyle. A first class public golf park and training center claims the peninsula - a delightful place that affords residents and tourists the opportunity to enjoy the benefits of the game. Coastal boardwalks and meandering bikeways allow for relaxed and rejuvenating exercise along the seacoast. The character of this town resides in the tonic of green nature, where no building rises above three stories. All streets, walkways and parks are filled with soft lawns, shady trees and brilliant flowers — a high quality of relaxation and comfort is seen as important. Nearby fine homes and condominiums offer local residents (either permanent or seasonal) the comfort of the seacoast. There are no tall resort towers here. The first-class residences, tourism hotel spas all benefit from the carefully selected amenities, public golf course and accessible tourism services. This area has the character of an intimate, low-density coastal California town, similar to Santa Barbara, where spas are purposely located on the ridge top with facilities for health and recuperative services. Spa buildings will be sophisticated, ecologically sensitive earth structures facing south, reinforcing the sense of living lightly on the earth in a healing and pure way. The whole of Lang Ya City Group is an opportunity to manifest contemporary Green Design to maximum economic sustainability. This village exhibits a unique microcosm where economic profitability is in the full expression of Green Design integrated with urban development and tourism for the Lang Ya City Group.

(Health spas, first-class residences, tourism services, public golf course. Target population: 6,000.)

3.1 企业旅游村(尹家圈)

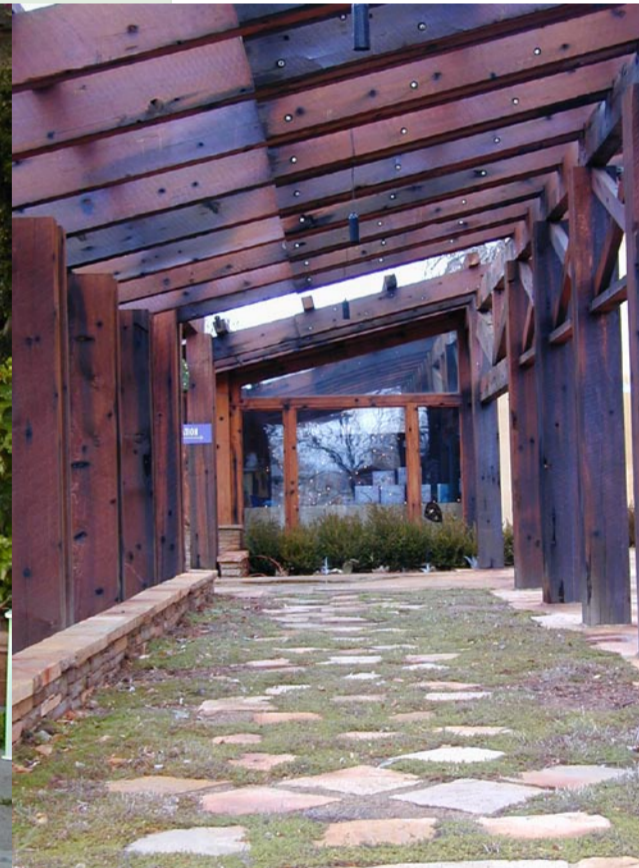
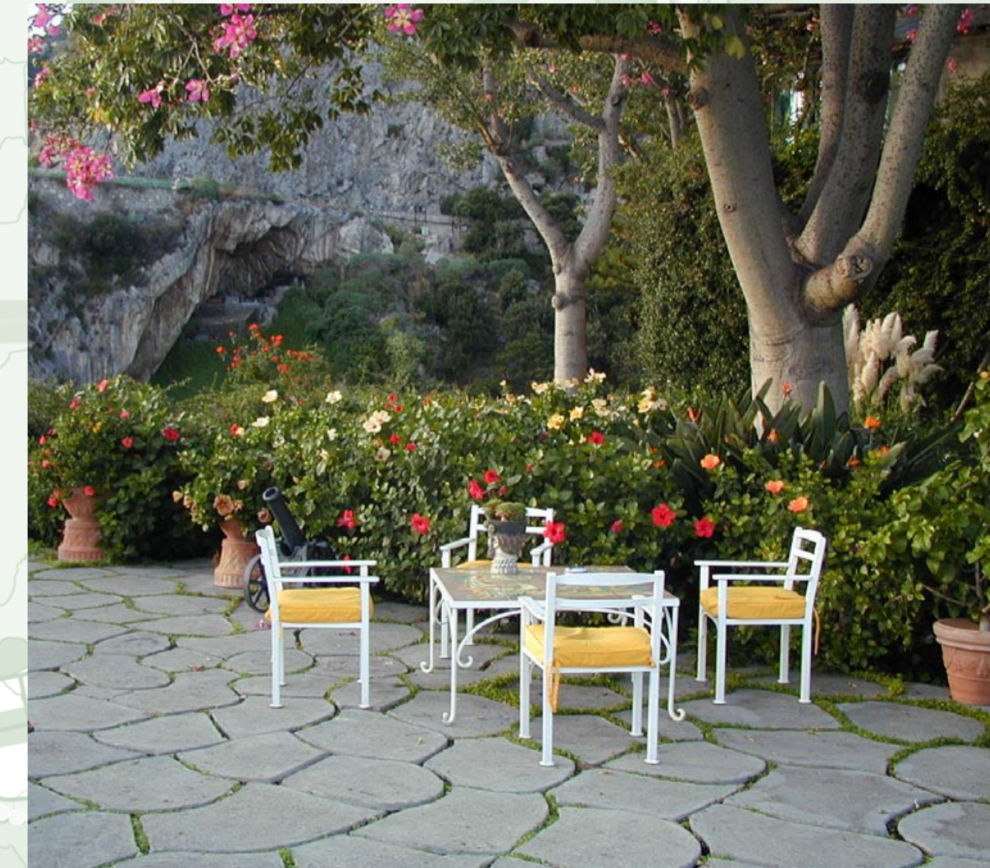
西海岸城镇的最北端,由于临近工业中心而成为一个旅游点。在这里,南北向的山脊将工业区与旅游区隔开,这山脊一直向南延伸,形成了半岛及许多美丽的海滨陆角。企业旅游村与新建海滨大道距离很近,从这里可以很方便的前往泊里镇和琅琊镇。因此,这儿很适于新建一个企业研究及培训中心。这个机构将协调旅游活动和工业发展,并进一步加强两者之间的联系。这个机构将培训区域内的企业家,经营小生意,并创建互联网站,加强宣传,以促进企业观光游览经济。这个海边小村将是经理、商家、企业家们居住的地方。除适于居住外,这个地区有轮渡与陆地相通,又有美丽的沙滩和可供休闲的海滨陆角。这些都是它绝妙的旅游资源。

(经理和企业主的住宅区,旅游服务,游客度假村,企业研究所及培训中心目标人口:9,000)

3.1 Entrepreneurial Tourism Village (Yijiaquan)

This northern-most of the western coastal towns is in the area of tourism as it nears and bridges to the industrial centers. Here the north-south ridge separates the industrial and tourism zones, and extends south to form a peninsula with pleasant coastal headlands. Entrepreneurial Tourism Village is situated closest to the new coastal highway, has the easiest access to Boli and Lang Ya Towns, and offers a perfect setting for a new Entrepreneurship Institute and Training Center. Such an institute will coordinate with both tourist and industrial activities and further the connection between the two. The Institute will train area entrepreneurs to operate small businesses, and will sponsor Internet web sites that help drive tourism to small businesses. This seacoast village will act as residential neighborhoods for managers, business owners and entrepreneurs. In addition to these residential characteristics, the area's water access through ferry service, beaches and recreational headlands all provide excellent opportunities for tourism

(Residences for managers and business owners; tourism services; tourist housing, Entrepreneurship Institute and Training Center. Target population: 9,000.)



3.2 南岸旅游村(山东头)

这个独立的旅游村位于半岛陆角的西部,位置独特。它位于工业区的另一侧,以山脊分隔。它适合于建设高档次的度假村和住宅区,提供给政府官员和商界领袖人物一个舒适的社区。这里还应建一些小酒店,为游客提供住宿和早餐服务,并提供游客一个轻松愉快的海滩。

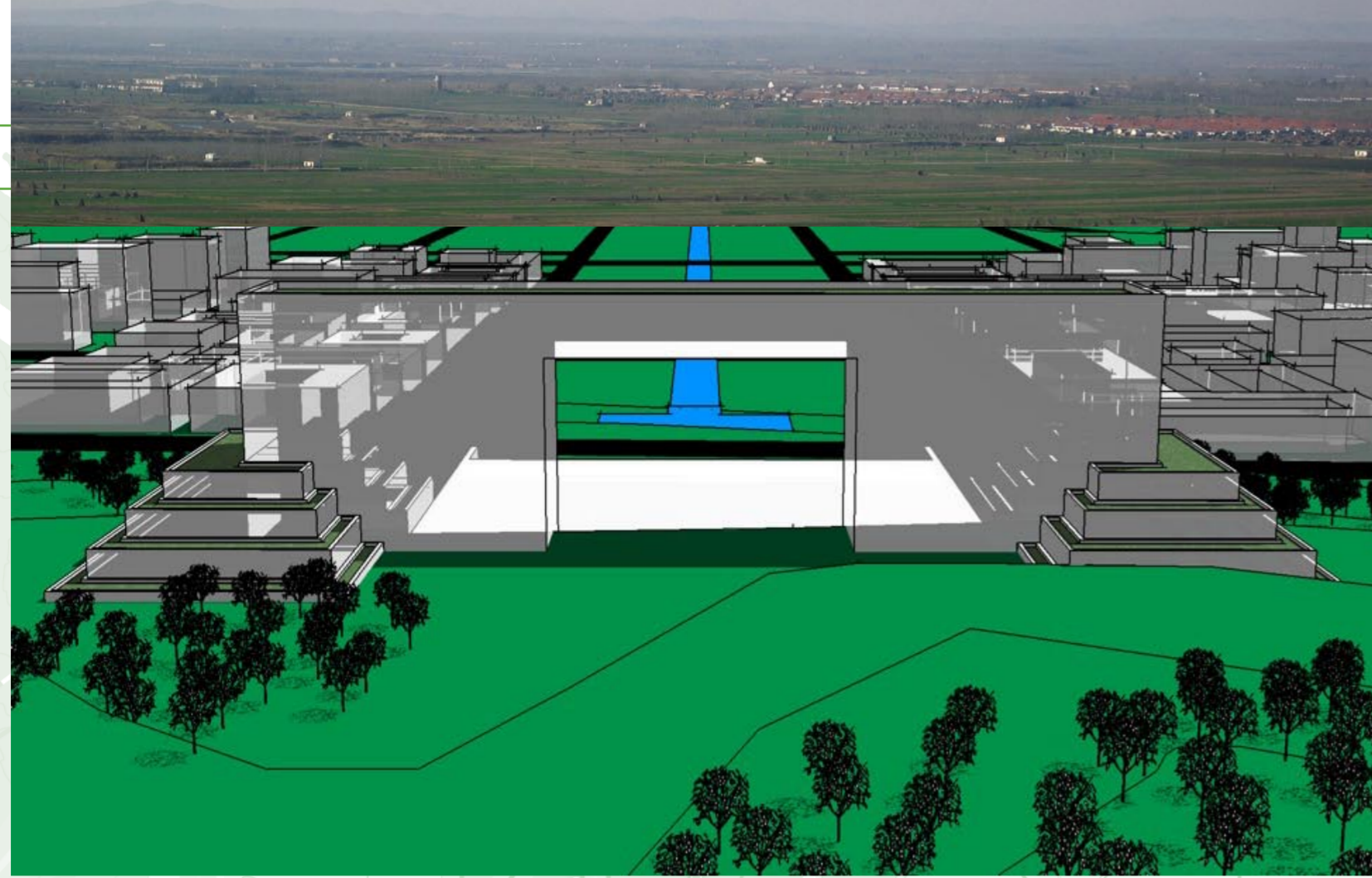
(经理和企业主的住宅区,度假别墅,旅游服务,旅游小酒店;目标人口:5,600)

3.2 South Coast Tourism Village (Sashougou)

This independent village holds a unique location along the western side of the peninsula headlands. It is on the other side of the ridge from the local industries and offers an excellent neighborhood for upscale vacation homes and for local regional government and business leaders' permanent residences. Small Inns and Bed & Breakfast accommodations should be the primary lodging for visitors; an ambiance of low-key relaxed seashore experience should be the order of the day.

(Residences for managers and business owners; vacation homes; tourism services; small-scale tourist accommodations. Target population: 6,300.)





焦点 4: 琅琊镇 Focus 4: Lang Ya Town

4.0 琅琊镇

琅琊镇是琅琊组团的市政管理中心和政府所在地。新设计的城区座落在北部群山中,并设定海拔30米等高线为新城扩展的海拔高度上限。新城区的地理位置,突出了该城市座北朝南的开阔视野和改善了城市的环境质量。有北部群山的保护和充分利用朝南的日照等优势,琅琊镇将会更加美丽宜人。新城区的中轴线连接着群山和大海,其中轴线直通海边新设计的海洋研究所,它象征着尊严、融和、科学和开放。在这个通往大海的中轴线的两旁由郁郁葱葱的树木所装扮,其北端,是一个小山林和城市公园。绝佳的风光,连同向阳展开的大草坪,与市政中心近在咫尺,将是整个城市最辉煌的景点。

紧邻小山林和城市公园南面的市政中心屹立着新的市府大楼,它是一座宏伟庄严的方拱型建筑,它即是通往群山的大门,又是连接秀丽的海边风景的桥梁。这个与大地融为一体的杰作将随地势自然向北延伸,两侧建筑逐渐升高犹如展翅飞翔的翅膀,它与山势相呼应,其间点缀花园,既美丽又充分利用了光能。它参托着市政府中心的权威,又同时激发整个地区沿着生态及绿色设计规划的方向向前发展。自然,市政府大楼所有的办公室、场所或者面向大海或者面向青山,其优雅的工作环境,肯定会令人神往。

市府大楼广场往下一条200多米宽的林荫大道,向南一直通向大海。这个林荫大道可用于举行各种功能的公众活动和服务。这里是生动多样的街区生活的一个很好的缩影。琅琊也应该是游人感兴趣和向往的地方!在琅琊镇的南部是可持续农业研究中心,中心里有多块试验田,用于研究、学习及进行有机栽培、水栽和盆栽等实验。

琅琊镇的总体布局和欧洲的城市相似。不同区域对建筑物高度实现不同的限制标准。市府大楼前面的建筑限高5层;其它市中心区建筑限高7-12层且综合利用;再向外层为小规模建筑,一般为3-7层;最外围密度最低,多为3-5层的建筑。

琅琊镇是组团经济发展策划和管理的中心。它将是整个区域的电信和技术基础设施的中心,也是组团的数字枢纽。它也将建一所重点大学的分校。

4.0 Lang Ya Town

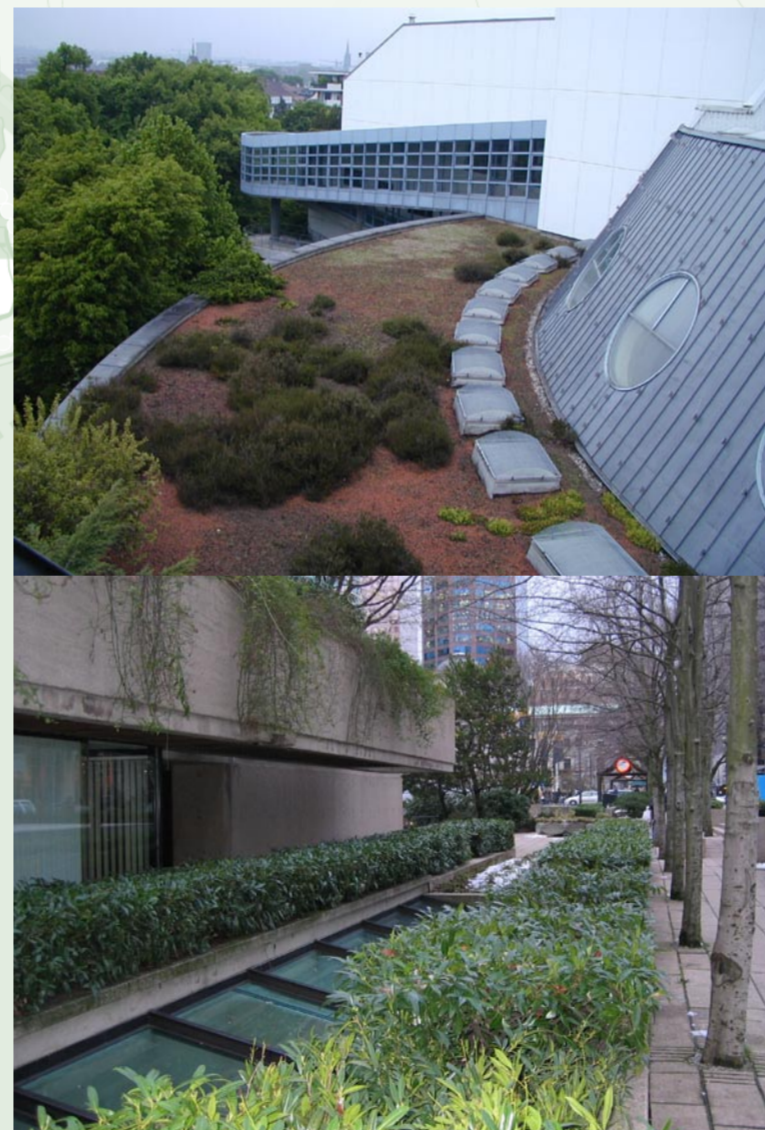
Lang Ya Town is the administrative center and the seat of government for the Lang Ya City Group. This city zone is nestled into and among the northern mountains, not to exceed the 30-meter base topography elevation. This positioning increases views while improving the environmental quality of the city. Lang Ya Town benefits from the protection of the north mountains and the south-facing sun's life giving energy. A central axis proudly connects the mountains to the sea, aligning symbolically with the new marine research institute on the coast. Just north and beginning this grand corridor to the sea, lined with a beautiful course of trees, is a mountain/city park for the people of Lang Ya Town to enjoy. Dramatic views, sunny open meadows and easy proximity to the city center make this a core asset.

Just south and purposely engaged within the south-facing mountain land form of Lang Ya Town Park is the new City Hall - a powerful square arch form, acting both as the gateway to the mountains and as a framed vista to the sea. This fine example of environmental architecture will be consciously integrated with the landform to the north with the wings stepping up to reflect mountain topography; it will be covered with gardens for energy benefits and beauty. This is an extraordinary opportunity to symbolize the center of governmental authority while inspiring the whole region towards an ecological and green design future. All offices and activities of this governmental center face either the sea or the mountains.

From the elevated City Hall plaza a 200-meter wide boulevard park leads south towards the sea. This boulevard is intentionally abundant with mixed-use activities and public services. Here is an excellent opportunity for a lively and diverse street life - Lang Ya also deserves to be an interesting and inquiring place for visiting tourists. Situated at the south extent of Lang Ya Town is the Sustainable Farming Institute for research, with extensive test gardens for study, research, and training of organic, hydroponics and boutique farming methods.

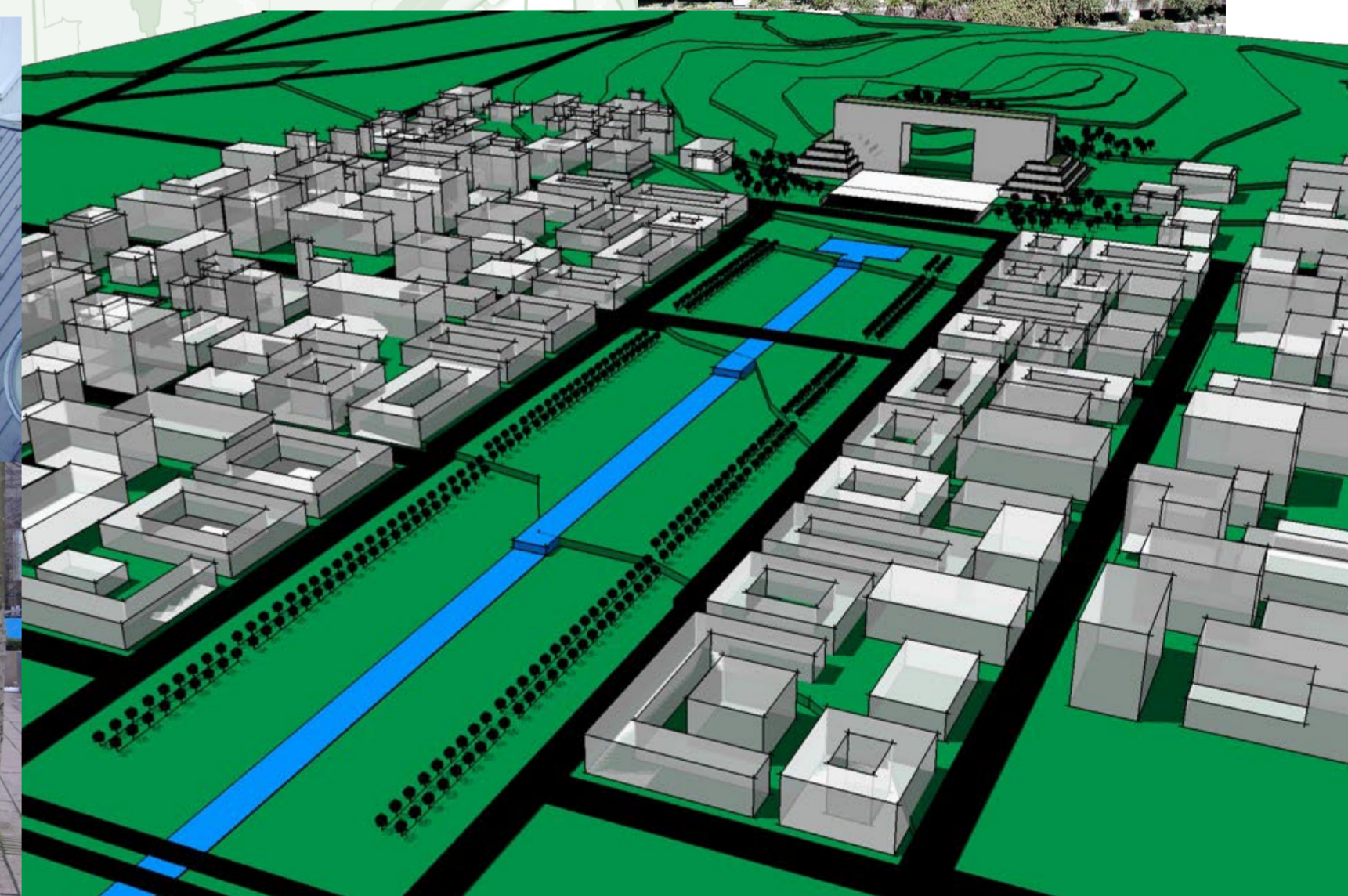
Lang Ya Town's general plan is similar in form to European models. Building heights are generally restricted in zones: the zone in front of City Hall is limited to 5 stories; the remaining central city core is limited to 7-12 story structures with intensive mix use; the next ring of development is lower in scale: 3-7 story buildings with mixed use; the periphery has the lowest density with 3-5 story buildings.

Lang Ya Town is the center of ongoing economic planning and brand management for the City Group, and will be the focus of the telecommunications and technology infrastructure; it will act as the digital hub for the City Group. It will also host a branch of a major university.



市政中心地区、住宅区、零售店、旅游和便民服务、地区大学分校。目标人口:74,500人

Center for regional government, residences, retail, tourism and residential services, regional university branch. Target population: 74,500.

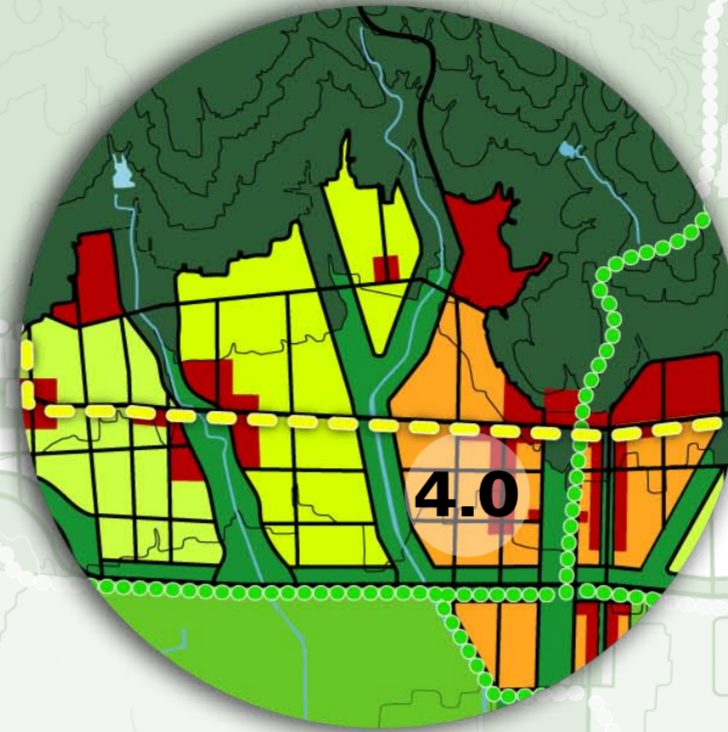


我们在设计时充分考虑了学校、医院、研究机构及其它重要社会场所和公共实施的分布。我们建议这些建筑应放在城市扩展边界的边缘或中心区的周边地带。同时,我们强烈建议各个社区综合考虑配备各种服务楼、敬老院、以及康复中心。

商业街及公共服务区都应设在各社区的中心。我们认为所有社区的规划应做到便于人们不用花多少时间可步行前往所需服务的场所。此外,轻轨站和公园的设置也应方便人们,设在较短的步行范围,以降低日常生活中开车出行的需要。

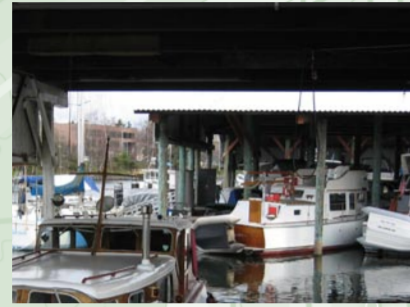
Careful consideration has been given to the location of schools, hospitals, study institutes and other significant community facilities. We suggest such buildings be located near the edges of the Urban Growth boundaries and at the edges of core neighborhoods. However, we strongly suggest the integration of service housing, like elderly and rehabilitation housing be fully integral to general neighborhoods.

Retail and general public service areas are centrally located to the various neighborhoods. We believe it essential that all neighborhoods be planned to have easy walking distance to essential services. Furthermore, light rail and park access is planned to be within the same easy walking distance, minimizing the need for automobile use in everyday activities.



分隔开泊里镇和琅琊镇的山脊绵延向南入海至“南头”。这些深入海中的陆角拓展了琅琊镇旅游资源,其东侧便是旅游区,西侧为工业区和沐官岛水库。这种地理位置上的并列整合工业和旅游功能、并使之互动互利提供了特别的条件。造船工业、风力发电厂和港口的发展将是本地经济的驱动力,也会增加这个地区的旅游吸引力。我们的规划包括了对这些珍贵海滨陆角的保护,并建议把他们开辟为公园,供居民和游人休闲。

The ridge separating Boli Town and Lang Ya Town watersheds extends south and concludes at "South Point Head". These fine marine headlands extend the Lang Ya tourist activities on the east side and flank industrial lands and Muguango Reservoir on the west side. This juxtaposition offers a unique opportunity to unify and integrate the industrial and tourist functions, gaining greater benefit for both. Economic drivers such as the proposed shipbuilding industry and wind power plant and port also extend the tourist attractions of this community. Our plan includes the preservation of the significant headlands as parks accommodating tourists and local citizens alike.



焦点 5: 南头港 Focus 5: South Point Seaport

5.0 南头船坞和南头港

我们建议把原来计划的沐官岛水库挡浪坝位置稍作移动,这样便可以腾出水面新建一个区域性的港口。此港口受海湾的良好保护,与规划工业区很近,也与地区的陆地交通联系方便。这样一个港口具良好的配套设施,可为造船、海洋服务、渔船船队、旅游、娱乐游艇提供服务,并可用于当地和区域的水上交通和运输。这个地区是造船业和海洋服务业的绝佳之地。这种滨海规划,既有利于促进经济发展,又具有极高的旅游附加值。

在初始阶段,捕捞渔船的制造可以使这个地区的渔船船队现代化。随后,这些制造设施则可制造帆船和摩托艇。我们可以采用现代干码头技术,降低港口对水深的要求,减少挖泥工程量。船坞可以继续保持其沿海工业功能,并同时增强工业服务的潜力,以支持沿海旅游业和渔业。我们还可以开发当地工业旅游资源,丰富游客游览内容。

5.1 南头滨海陆角公园

山脊绵延入海的部分非常适于建设公园和娱乐场地。开闢的滨海陆角,保护好了,可以保持这个地区的质量和特色。通过强化这一工业和旅游业的结合,滨海公园可以创造空间,提高环境质量,为当地居民和游人提供休闲去处。

5.0 South Point Shipyards and South Point Port

We recommend modifying the previously proposed Muguango Reservoir seawall at this location; the result is a significant new regional port, well protected, adjacent to planned industries, and having easy regional ground transportation access. Such a port offers facilities for shipbuilding, marine service, fishing fleets, tourism services, recreational boating, and a port for local and regional water transportation. The area becomes an excellent location for shipbuilding and marine services. Such coastal activities obviously serve economic development, but have the added value of being of great interest to tourists.

Initially, the manufacture of fishing vessels can modernize the area's fishing fleet; the facility will eventually manufacture sail and motor yachts. Modern dry-dock techniques would be established to obviate deep-water port requirements, thus minimizing dredging. The shipyard continues the industrial function to the sea; it also increases the potential for industrial services to supply the coastal tourist and fishing industries. Local industry tours can be planned to extend the activities available to tourists.

5.1 Marine Headlands at South Point Park

The extended ridge and its marine headlands offer excellent potential for park and recreational lands. The open coastal lands and their preservation maintain the quality and character of the region. Highlighting this juncture of tourism and industry, the headland park creates appropriate open space, environmental quality and recreation for both the local citizenry as well as the visiting tourist.



5.2 沐官岛和沐官岛水库

按我们的规划,原先规划的沐官岛已做调整,以给南头船坞和港口腾出空间。沐官岛水库将提供生产用水,而由其它水库提供饮用水。沐官岛水库也具备大规模风力发电的巨大潜力。风力发电机可以提供琅琊组团发展所需电力的30%,但不会造成一点污染。现代风力发电机每台可发电一兆多瓦以上,每千瓦时耗电约0.16元。这使风力发电特别经济和具有很强的竞争力。此外,最近反渗透膜技术的开发大大降低了海水淡化的费用。有了周围的电能和海水淡化新技术的改进,在未来,海水淡化可以是淡水的重要来源。我们建议在沐官岛上设一个研究所,研究风力发电和海水淡化的可能性。由于这两项技术可以相互补充,又可以极大地提高这个地区供水供电能力,我们建议坚持对这两项技术进行研究开发。风力发电场非常壮观,它可以是一个旅游热点。

我们通过对沐官岛水库南面挡浪坝的进一步考虑,认为它具有停靠大型船只的可能。这个深水挡浪坝可以配套管道,向水库西侧的炼油厂和化工厂输送原料(不在此规划范围内),这样便可以极大地拓展这个地区的工业生产潜力。

5.3 南头村(姚头)

这个集旅游业、制造业为一体的港口村座落在海滨陆角上,其中的小旅馆、商店、服务设施等可以支持东部南头公园和港口地区的旅游活动。这个地区游人云集,活动繁多,非常适于居住和工作。它交通便利,是连接轻轨交通系统和滨海轮渡系统的枢纽。人们在此地很容易地可以感觉到娱乐和工作之间的平衡和满足。

所有这些当地的各种活动方方面面决定了南头村的特色。这个村的多样性和活力使它成为人们居住工作最有趣的地方,它同时也是旅游的好去处。

(居住,旅游服务,商业零售,综合利用。目标人口:5000)

5.2 Muguango Island and Muguango Reservoir

The previously proposed reservoir has been modified to make room for South Point Shipyards and for South Point Port. The Muguango Reservoir will supply water for manufacturing uses, which makes water from all other reservoirs available for potable uses. The Muguango Reservoir also appears to be a promising setting for large-scale wind-energy farming. Wind-power generators have the potential of contributing up to 30% of Lang Ya City Group's electric power needs without creating air pollution. Modern wind generators can produce in excess of one megawatt per windmill, with electric cost approaching RMB 0.16 per kilowatt-hour, making it economically competitive. In addition, a new reverse osmosis technology has recently reduced the cost of desalination. With the quantity of nearby power and improvements in this technology, desalination could become a practical source of fresh water in the future. It is our suggestion that a research station be located on Muguango Island in the bay to investigate the potential of wind power and desalination. We recommend the pursuit of these two technologies since they are complimentary and could significantly upgrade power and water supply in the region. Wind-energy farms are visually dramatic, and provide another tourist attraction.

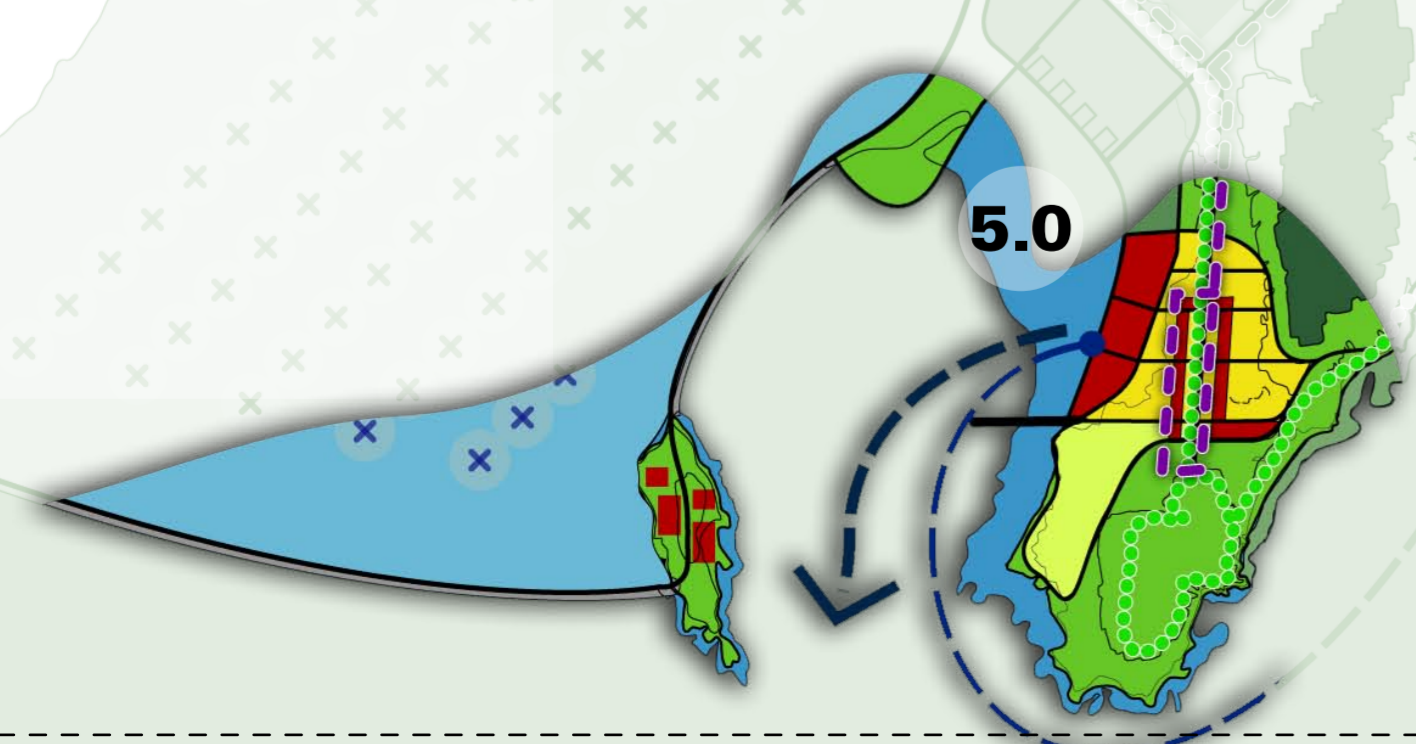
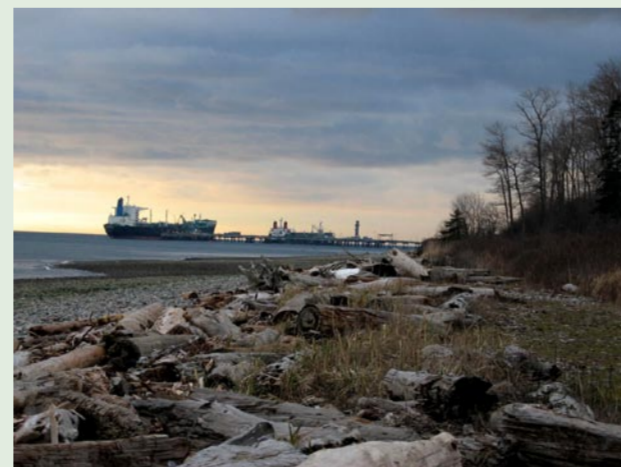
A further consideration for the south seawall of Muguango Reservoir would be its potential for docking larger ships; this deeper water dock zone could support pipelines along the seawall to chemical plants and oil refineries located west of the Reservoir (outside this planning zone), and could significantly extend the industrial potential of the greater area.

5.3 South Point Village (Yaotou)

This mixed-use tourism and manufacturing port village is well located among the coastal headlands. Small inns, retail, and services support active tourism along South Point Park and on the harbor. This is a great place to live and work, diverse and filled with the excitement of visitors and coastal activities. Regional transportation services, in addition to roads, make this a hub connecting the light rail network with the coastal passenger ferry system. This is clearly place of balance between recreation and work.

All of these related local activities help define the busy South Point Village. With the diversity and activity in the area, this village will become a most interesting place for people to live, work and provide tourism services.

(Residential, tourism services, retail, strong mixed use. Target population: 5,000.)





焦点 6: 泊里镇

Focus 6: Boli Town

6.0 泊里镇

泊里镇在琅琊组团的位置很好,镇周围有高速公路、铁路和水路相通。它很适合发展工业和制造业。相关的政府基础设施、管理办公室和基础设施维护机构的设立,将使泊里镇成为琅琊组团公共基础设施的枢纽。它紧邻同三高速及与同三高速平行的铁路,便捷的交通与青岛新建的深水港口及山东其它经济中心相连。我们规划的复合公路系统可以将工业车辆和居民、旅游车辆分流。另外,轻轨系统连接了市中心、工业区和琅琊组团的其它区域。

琅琊组团的工业和公共设施总的监督管理办公室设在泊里镇,其中包括电力、热电、自来水、污水处理、水质监控、运输服务和加油站分配管理。水力、风力和火力发电需统一综合管理,加强协调。农用机械的供用及配套服务也将以此地为中心。随着工业生产的多样化和发展,人们需要一个繁荣的市中心,用来满足金融、商贸、公共服务及商务旅行服务的要求。当地的建筑业需要配套一个建材供应和分销中心,以及一个加工区,以满足经济快速增长的需要。新建轻轨的基础设施管理和维护机构也设在这儿。泊里镇将是一个工业管理集团和配套服务的中心。



6.0 Boli Town

Boli Town is well located within the Lang Ya City Group. With nearby regional highways, rail and water access, this is the ideal area for industrial and manufacturing support and services. The associated government infrastructure oversight offices and infrastructure maintenance facilities will make this city the hub of Lang Ya public utilities. With the adjacent Tongsan Expressway and its parallel rail link, the new deep-water port of Qingdao and other Shandong business centers are readily available. Our proposed dual-road networks separate heavy industrial traffic from the tourist and domestic flow. A light rail serves the city center, the industrial zones and greater Lang Ya City Group.

The general oversight and management of Lang Ya industries and public utilities are headquartered in Boli, including electric power and heat generation, water supply, wastewater treatment, water quality oversight, transportation services and fuel distribution centers. Integration of hydro, wind, and fossil fuel power generation requires careful management and coordination. Farm equipment with supporting services and supply will be centered here. As the diversity of industries grow, they will need an active urban center for banking, retail, public services, and visiting business people. The local building industry will need supply and distribution centers, and manufacturing staging zones for the rapid growth requirements. New light rail infrastructure management and maintenance facilities will be located here. Boli Town is the center of industrial management groups and their associated support needs.



泊里镇的标记性中心区是市府大楼。同时,它也是人们聚会和社区服务的场所。在泊里镇设置一个工业研究所及培训中心,可以促进本地区的成功发展。现有204国道将预留有一个重要的交叉口,连接通往市府大楼和工业研究所的大道。这条宽200米的大道向南延伸,穿越市府大楼前的人工运河,把市中心和南部大公园连接起来。

我们在设计时充分考虑了学校、医院、研究机构及其它重要社会场所的位置。我们建议这些建筑应放在城市扩展边界的边缘或主要社区的周边地带。同时,我们强烈建议各个社区综合考虑配备各种服务楼、敬老院、以及康复中心。

在发展泊里镇时应注意仔细考虑其生活质量问题。我们要详细评估当地的地形和流域,来确定绿地分布和建筑的具体方位,以期保证最佳的环境质量、水质和娱乐效应。最重要的是,确定城市扩展边界是为了保证山区环境保护、农业生产、工业增长、地区旅游业的发展和整体生活质量的最优化。泊里镇的扩展及今后发展应向北发展,并通过流域评估加以确定。城区南部边界的限制,保护了附近农田景观和工业区的美景。建筑高度应限制在30米高,以保护山区景观。社区设计注重考虑步行便利,充满生活气息,靠近商场、公共服务设施、交通网站和社区公园。泊里镇将是泊里人民以高度的环保意识,为他们自己建立的现代化工业和农业城市。

(住宅区,政府基础设施,零售,服务,地区运输服务,工业研究及培训中心,目标人口:97,300)

The symbolic center of Boli Town will incorporate government buildings for community assemblies and services. The Industrial Institute and Training Center will further the development and success of the region. An important intersection along existing regional highway 204 is reserved for the government buildings and the Industrial Institute. A green 200 meter-wide boulevard connects the city center south to a large open park at the intersection of watercourses.

Careful consideration has been given to the location of schools, hospitals, study institutes and other significant community facilities. We suggest such buildings be located near the edges of the urban growth boundaries and at the edges of core neighborhoods. However, we strongly suggest the integration of service housing, such as elderly and rehabilitation housing be fully integral to general neighborhoods.

Quality of life is a deliberate consideration in developing Boli Town. Careful assessment of the topography and the watershed define the green area networks and building sites for maximum environmental and water quality, as well as for recreation. Most significantly, urban growth boundaries are precisely defined to maximize the benefits of the mountains, farm production, industrial growth, regional tourism and overall quality of living. Expansion and long-term growth of Boli is directed north and defined by the topography and the watershed. The south urban boundary is sculpted from the views and scenic beauty of the adjacent farm and industrial lands. A 30-meter base building limit preserves the mountain views. Neighborhoods are designed to be walk-able and very livable, with easy access to shopping, public services, transportation, and spacious community parks. Boli is an environmentally conscious industrial and farm city, of and for its people!

(Residences, government infrastructure, retail, services, regional transportation services, Industrial Institute and Training Center. Target population: 97,300.)



农业、工业和旅游业最理想的结合,应该互助互利、极大地促进各行业的共同发展。工业区周边及附近绿化缓冲带、生态区的环境效应、高产农业园区等,这都是琅琊组团振兴经济发展和提高生活质量提高的重要因素。这些农业和工业的特别因素也成了受欢迎的旅游景点。工业发展及产品生产靠的是市场开拓,而旅游业的增长靠的是丰富多样的旅游景观和各种形式的旅游活动。旅游活动越多,旅游的人就越多,富饶的土地越多,农业经济的发展则会越强劲。工业生产越综合,越注意生态保护和越考虑人的因素,人们会越认真的工作、效益就越高。所有这些都是从相互协同效应中受益。

The thoughtful integration of farming, industry and tourism deserves to be mutually beneficial and profoundly symbiotic for all. Green-space buffers near and around industry, eco zones that are both environmentally life supporting; high productivity agriculture; taken together these goals intensify the economic and life quality for the Lang Ya City Group. These agricultural and industrial elements also become compelling tourist attractions; the industries and products benefit from greater marketing exposure, while the local tourism industry benefits from a greater variety of choices. The greater the number of tourist activities, the more frequent the visits become. The more productive land is available for high-yield agriculture, the stronger and more economically successful agribusiness can be. The more integrated, eco-responsible, and lifestyle oriented industry is, the more seriously productive will be the work force. All these various forces benefit from mutual synergy.



焦点 7: 农业、工业和农业旅游业

Focus 7: Farming, Industry and Agri-Tourism



7.0 专化农田

专化农田在琅琊组团中有着许多经济、生态、景观和改善人们生活的作用。我们推荐种植高附加值的作物,它们可以把农田装扮得有趣而美丽,例如,果园,葡萄园等。随着橄榄和橄榄油在中国的普及,也许值得我们研究本地区种植橄榄的可行性。通过葡萄和果树种植而带来旅游收益的典型例子有加洲的索诺玛(Sonoma)和纳帕(Napa)县、法国的勃甘蒂(Burgundy)和意大利的图斯堪尼(Tuscany)。这些地区的农业生产创造了可观的经济利益,同时也吸引了大量的游人,给旅游业带来了很高的收益。在意大利,人们称之为农业旅游业(Agriturismo)。游人被农田景色所吸引,也被周围提供其它旅游服务的城市所吸引。许多人喜欢在一个农家小院里住上一宿,吃上一顿农家宴;另有一些人喜欢四处漫步,然后返回当地度假中心。骑自行车旅游也非常普遍。

组团内,农田的北部成为城区扩展边界,它成为北部城区和东南部旅游度假区之间的绿色缓冲带。这大片生态绿色,风景秀丽的农业景观就位于琅琊城市组团的心脏地带,它提高了整个组团的值,是一个强大的经济驱动,它为市民创造了更高的生活质量,并吸引了四面八方的游客来此休闲旅游。它是成了城市组团的一个重要组成部分和成功的标志。

我们可以通过水泵从沐官岛水库抽水至海拔较高的农田水库(可能可以利用风力驱动的水泵),然后通过重力自流,灌溉整个地区的农田。

7.1 可持续农业研究所

这个研究所主要负责研究适合当地的高产农业栽培方式和农作物产品。其主要任务包括研究节约用水的栽培方法,及改善生态和环境的途径。作为一个基础研究和实验机构,研究所拥有自己的实验田和温室。它将深入研究温室里的水培方法,以及生产屋顶栽培的材料和推广应用。研究所距市区不远,可俯瞰整个农业区。它将培训农民,推广有机及生态可持续性农业。



7.0 Specialty Farmland

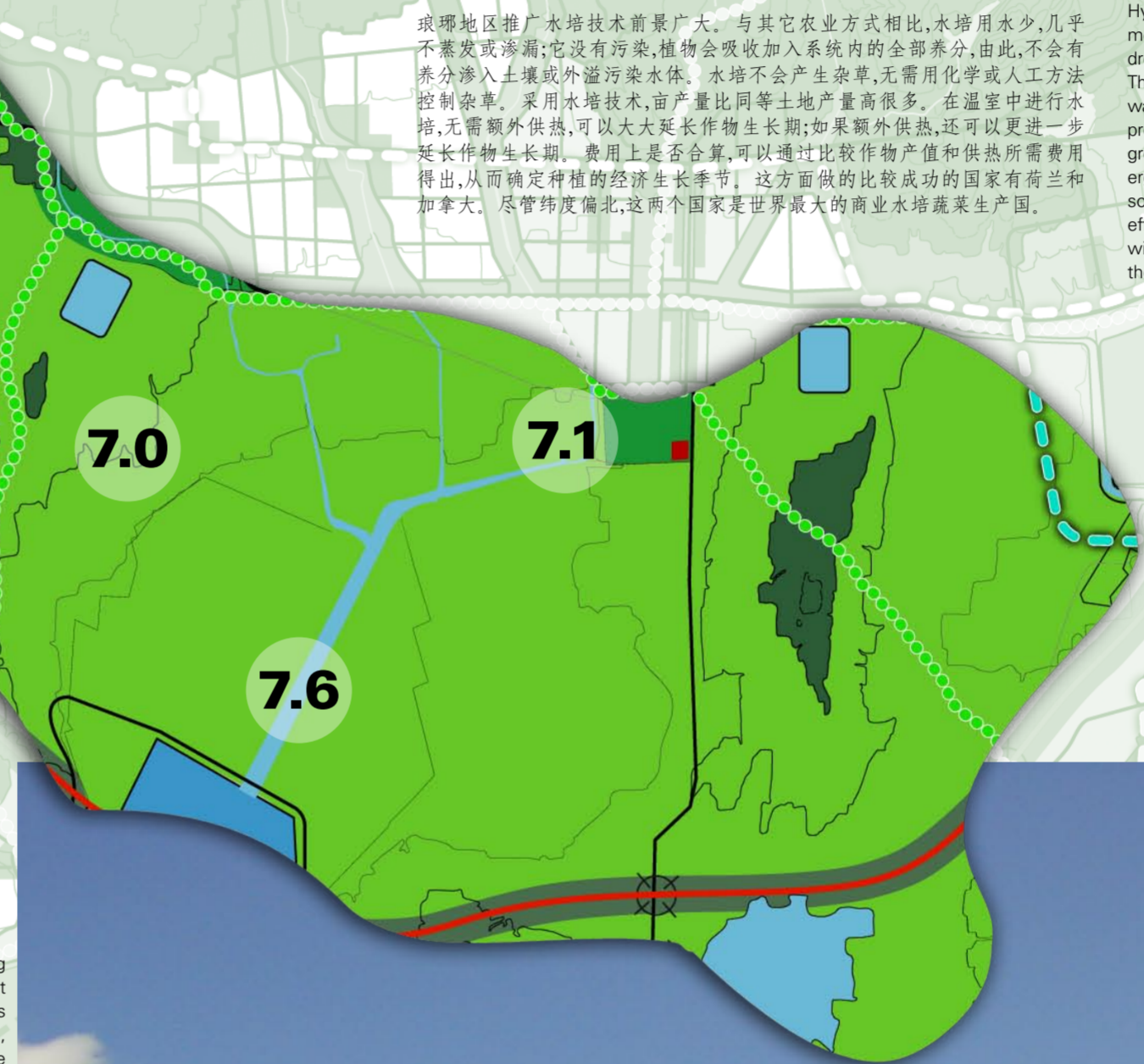
Specialty Farmland serves many economic, ecological, scenic and quality of living purposes for the Lang Ya City Group. We recommend planting high-value crops that create graphically interesting and scenically beautiful farmland, such as fruit orchards and wine grape vineyards. Since olives and olive oil are gaining popularity in China, it may be worth investigating how well olive trees grow in this region. Model wine and fruit agriculture examples that benefit from tourism include Sonoma and Napa Counties in California, Burgundy, in France and Tuscany in Italy. These areas generate significant economic benefit from agricultural production, but they also attract the high economic value of tourism. Called "agritourismo" in Italy, tourists are attracted to both the agricultural lands themselves, and to the surrounding urban areas that provide additional tourism services. It is very popular for tourists to stay at farmhouse Bed and Breakfasts during their visits, while others tour the areas and then return to local resorts. Bicycle tourism is also popular.

The farmlands create a green buffer between the urban growth boundaries in the north and the tourism and resort communities in the south and east. This large eco-green and scenic area in the heart of Lang Ya City Group enhances and value of the total area, functions as a strong economic driver, creates a higher quality of life for residents, and attracts a broad cross-section of tourists. It then becomes an important element of in the successful branding of the City Group!

Irrigation of farmland is achieved by pumping water (possibly through wind driven pumps) from the Muguando Reservoir into agricultural reservoirs at higher elevations. Simple irrigation is then delivered though gravity feed to the desired areas.

7.1 Sustainable Farming Institute

This institute will be charged with defining the intersection between high value agricultural plantings and farm products that will thrive in the area. Important tasks will include the study of methods to minimize water use and improve the ecology. As a primary research and testing facility, the Institute uses its campus for study gardens and greenhouses. It will research practical applications for hydroponics in greenhouse and manufacturing building rooftop applications. This facility is located near the city and overlooks the general farming region. It will train farmers in the implementation of organic and ecologically sustainable agriculture.



7.2 水培农业

水培农业无需土壤,种植上等蔬菜、水果和草本。作物所需养分由水溶性矿物提供。这项古老的技术已日趋完美,成为一个稳定的可持续性商业化栽培技术。

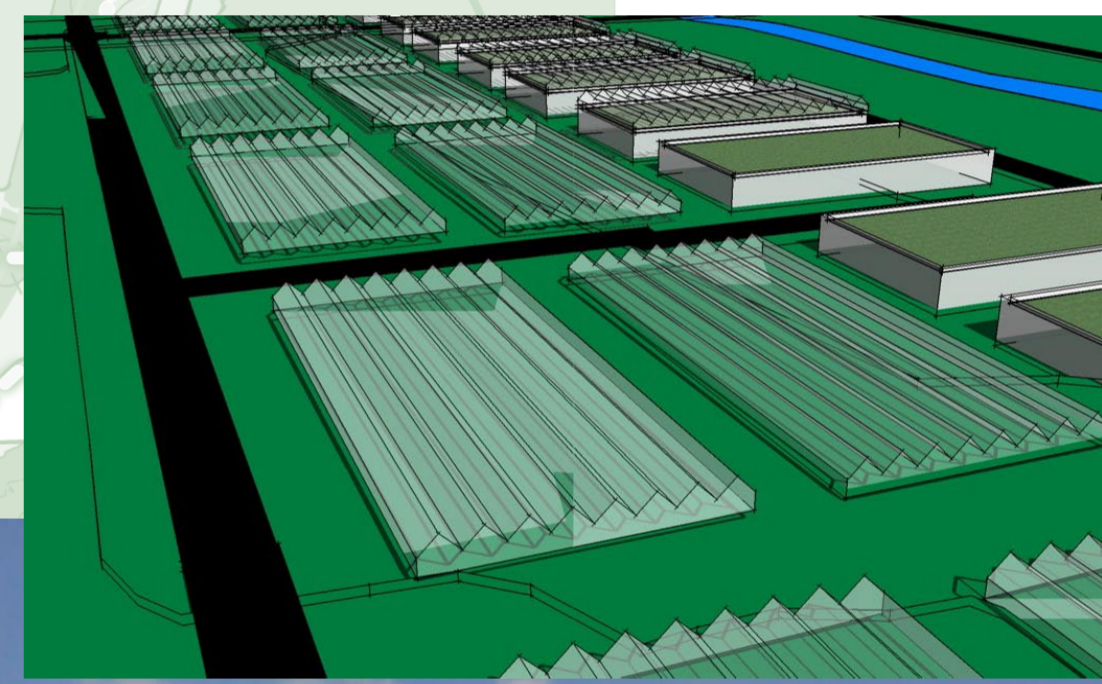
琅琊地区推广水培技术前景广大。与其它农业方式相比,水培用水少,几乎不蒸发或渗漏;它没有污染,植物会吸收加入系统内的全部养分,由此,不会有养分渗入土壤或外溢污染水体。水培不会产生杂草,无需化学或人工方法控制杂草。采用水培技术,亩产量比同等土地产量高很多。在温室中进行水培,无需额外供热,可以大大延长作物生长期;如果额外供热,还可以更进一步延长作物生长期。费用上是否合算,可以通过比较作物价值和供热所需费用得出,从而确定种植的经济生长季节。这方面做的比较成功的国家有荷兰和加拿大。尽管纬度偏北,这两个国家是世界最大的商业水培蔬菜生产国。



7.2 Hydroponic Farming

Hydroponic farming grows premium grade fruits, vegetable and herbs without the use of soil - plant nutrition is provided by water-soluble mineral elements. This ancient technique has been perfected into a viable, sustainable commercial process.

Hydroponics holds great promise in the Lang Ya area. Compared to other farming methods, much less water is used, because there is no evaporation or drainage. Hydroponics is pollution-free, because the plants use all nutrients put into the system. This means there is no leaching into the soil, or runoff that can contaminate waterways. There are no weeds, so chemical or manual weed control is unnecessary. The production of premium quality produce is much higher per acre of land used. When grown in greenhouses, the growing season is extended without additional heat energy, and heating can extend the season much more. The cost-effective growing season can be calculated by comparing crop value with heating cost. Demonstrating the effectiveness of extending the growing season, the Netherlands and Canada, even with northern climates, are the top commercial hydroponic vegetable producers in the world.



我们建议把温室放在工业区是出于多方面的考虑。其中包括对工业生产余热的利用。我们建议用聚碳酸酯塑料薄膜(Polycarbonate)搭建温室,这种材料又轻又便宜。可以开设当地的一家工厂专门生产这种聚碳酸酯塑料薄膜(Polycarbonate);另一家工厂可制作温室,供本地使用或出口。

这儿还有一个好例子:日本已成功地利利用屋顶进行水培。这种屋顶栽培方法是除温室外增加农业产量的又一选择。水培可在大部分工厂的屋顶上,可以附加温室或者不加。屋顶栽培增加了农业生产的空间,同时作物还可以作为建筑物内外的热屏蔽,减少建筑物内热量损失或吸收外部的热量。

比较有经济效益的作物有西红柿、红薯、绿色蔬菜和新鲜草本等。当地农产品可以运往琅琊组团市区及旅游区销售,既增强了这些地方的生态可持续性,又减少了从其他地区进口食物,从而降低了长距离运输而对生态和环境的破坏。

We recommend location of greenhouses in the industrial area for a number of reasons, including the advantage of using co-generated heat from manufacturing processes. We recommend that greenhouses be manufactured of polycarbonate, an inexpensive, lightweight material. One of the local industries could extrude polycarbonate, and another could manufacture greenhouses for local use and for export.

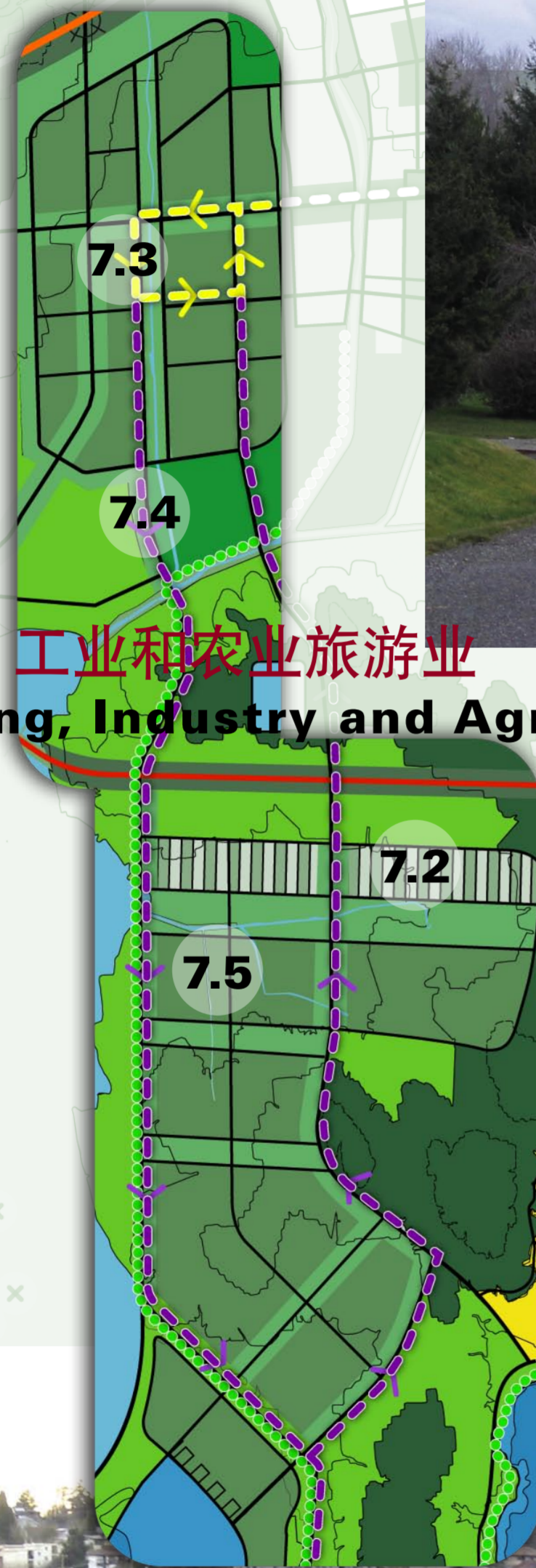
Another good example: For many years, Japan has successfully used rooftops for hydroponics. This roof top approach is another option to expand farm production outside the greenhouses. Hydroponic gardens can be placed on the rooftops, with or without greenhouses, of most manufacturing buildings. In addition to providing more space for agricultural production, the plants act as a thermal shield between the outdoor elements and the interior of the buildings, thus reducing heat loss or gain.

Examples of cost-effective produce include tomatoes, sweet potatoes, leafy green vegetables, and fresh herbs. Local produce delivered to urban and tourist areas in Lang Ya City Group create an added benefit for ecological sustainability: it decreases the import of food from other areas, and therefore decreases the environmental degradation created by shipping produce long distances.





焦点 7: 农业、工业和农业旅游业 Focus 7: Farming, Industry and Agri-Tourism



7.3 重工业和中型工业区

重工业和中型工业区设置于同三高速公路及新建铁路线附近,以方便货物运输。应优先在工业区内敷设一条铁路支线(图上没有标明),可以满足那些需大批量运输货物的工厂的需要。工业区的绿地空间把地表水收集到中央绿地排水系统中,进行生物过滤处理。这些生物绿地,可以改善空气质量和水质,又是当地居民休闲娱乐的好去处。大部分职工将住在附近的泊里镇,他们可以步行、骑自行车或搭乘轻轨上下班。

琅琊组团的规划综合考虑生活质量和这个制造产业基地之间的结合,创造了一种高水平的可持续发展的模式。位于西雅图市140公里处的泊凌翰Bell-ingham镇在这方面做得非常成功。这个镇的人口是170,000,正如琅琊组团一样,它是一个山海之间的生活质量很高的美丽的城镇。镇的北部沿海有世界产量最高的英国石油炼制厂。英国石油公司经多年研究得出一个结论:与其它采用相同技术的炼油厂相比较,这个厂的典型特征是职工的良好团队精神和工作态度。

7.4 污水处理设施

工业区的南端留有一个水质管理的重要地块。在这儿,工业废水、生活污水、工业及非工业地表水采用不同的系统进行处理。这个地方是整个琅琊组团的污水处理中心。在组团发展及转型期间,可采用喷淋灌溉,逐步达到三级污水处理。工业区的地表水将通过绿地排放;再通过生物滤池,最后汇入沉淀池完成水的处理。把几个水质控制机构都设在一个区内,以便利对水质的监控。这些水处理区也将是一个非常有意思的公园,它可以帮助人们更好地了解他们对其的使用及影响。这里也是设置水质及自然资源管理研究所的好地方。

鉴于沐官岛水库将是本地区主要水源地,连续提高对水质的监控变得十分重要。沐官岛水库应提供主要的工业和农业用水,所有山区水库则用来提供居民用水。

7.5 轻工业和中型工业区

由于这个地区临近海滨和度假区,我们建议把它规划为轻工业和中型工业区及南头造船区。工业绿地可作为地表水的生物过滤,并提供绿色空间。一条轻轨沿水库延伸,直至南头村。轻轨方便了职工上下班和旅游交通。这个地方也将是主要屋顶水培区。造船业及其它工业为旅游开发增添了许多可能。例如,波音公司制造厂便是西雅图最受欢迎的旅游热点之一。其它世界流行的旅游观光景点包括酿酒、奶酪制作、摩托车制造、玻璃冲泡甚至软心豆蔻糖制作等。当然,我们不是建议在此地搞上述工业,我们只是借此证明发展工业旅游的可能性。

所有制造工业区应注意考虑集装箱运输,应综合考虑铁路、公路和水路的集装箱运输。

7.6 水产养殖

该地区现有的水产养殖业会进一步得到加强和发展,水产资源的管理会进一步强化。随着海洋研究所的技术开发和运用,高产出、高附加值、可持续性的水产养殖方法将得到更多的推广应用。它将替代其它地方的养殖,使那些地方的土地可以作为其他用途。与此同时,随着技术的进步,水质的提高和水质管理的改善,反过来将进一步促进水产养殖业的发展。

7.3 Heavy & Medium Industry zone

This primary industrial zone is strategically located near Tongson Expressway and the new railroad line, for easy access to regional supply routes. A right of way for a potential railroad spur within the industrial zones (not shown on the map), would serve manufacturers requiring large bulk deliveries and shipments. The industrial green spaces collect surface water to the central green belt drainage, to serve as bio filtration. These bio-green zones, in addition to improving the air and water quality, provide recreational and park spaces for local workers. Most employees would reside in nearby Boli Town, commuting to work by walking, bicycle or the use of light rail.

The integration of the quality of living in the Lang Ya City Group with this manufacturing base creates a high level of sustainability. A good example is the town of Bellingham (population 170,000), 140 km north of Seattle. Like Lang Ya City Group, it is a beautiful area between in the mountains and sea, considered to have a high quality of living. Near the coast north of town lies a British Petroleum oil refinery that is considered the most productive in the world. After much research, British Petroleum concluded that the teamwork and attitude of employees is the distinguishing feature from other plants that use the same technology.

7.4 Water Treatment Facility

At the south end of the industrial park, a substantial area is set aside for water quality management. Within this zone are different systems for industrial and domestic wastewater, industrial surface water and non-industrial surface water. This location will become the main wastewater treatment center for all of the Lang Ya City Group; during the growth and transition period, spray irrigation could be used, giving way to full tertiary water processing. The industrial zones would process their surface water runoff along the green area drainage and complete the process in bio filters and sediment ponds at the confluence this treatment park. Good monitoring practices can be maintained by bringing together several water quality facilities into one zone. Such treatment zones make for extremely interesting parks, helping citizens to better understand their use and effects on water supply. This is also an ideal location for the Water Quality and Natural Resource Management Institute.

Since the Muguando Reservoir will become a significant source of regional water supply, the constant upgrading and evaluation of the water quality will be essential. The Muguando Reservoir should be dedicated to industrial and agricultural use; all the mountain reservoirs are directed to domestic use.

7.5 Light & Medium Industry zone

Because of its proximity to the coast and tourist resorts, we recommend this area to support light and medium industry, as well as shipbuilding at South Point Port. Industrial green areas will provide bio filtration for surface water as well as create open green space. One path of the light rail line runs along the reservoir and into South Point Village, supporting both manufacturing employees and visitors. This will also be the primary focus area for rooftop hydroponic gardens. The ship building and other selected industries provide potential for tourism. For example, the Boeing manufacturing plant is among the most popular tourist destinations in the greater Seattle area. Other popular tours worldwide include breweries, cheese production, motorcycle manufacturing, glass blowing and even jellybean manufacturing. While we're not recommending these specific industries for this area, it illustrates the broad potential of manufacturing tourism.

Both manufacturing areas should emphasize container shipping for flexible transport via rail, road, and waterway.

7.6 Aquaculture

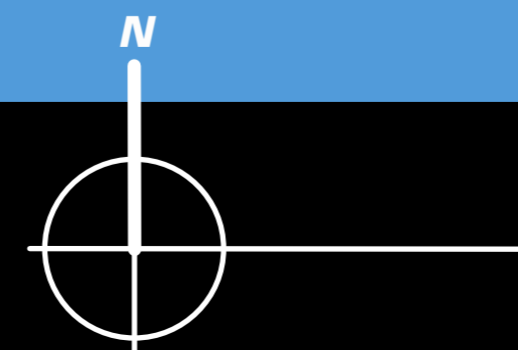
The existing aquaculture in this area will be expanded, and resource management will be intensified. With techniques developed by the Marine Institute, high-output, high-value, sustainable aquaculture will yield product value that replaces existing aquaculture production in other areas that have a changed land use. Also, as better methods develop, improved water quality and water quality management will further improve the aquaculture industry.



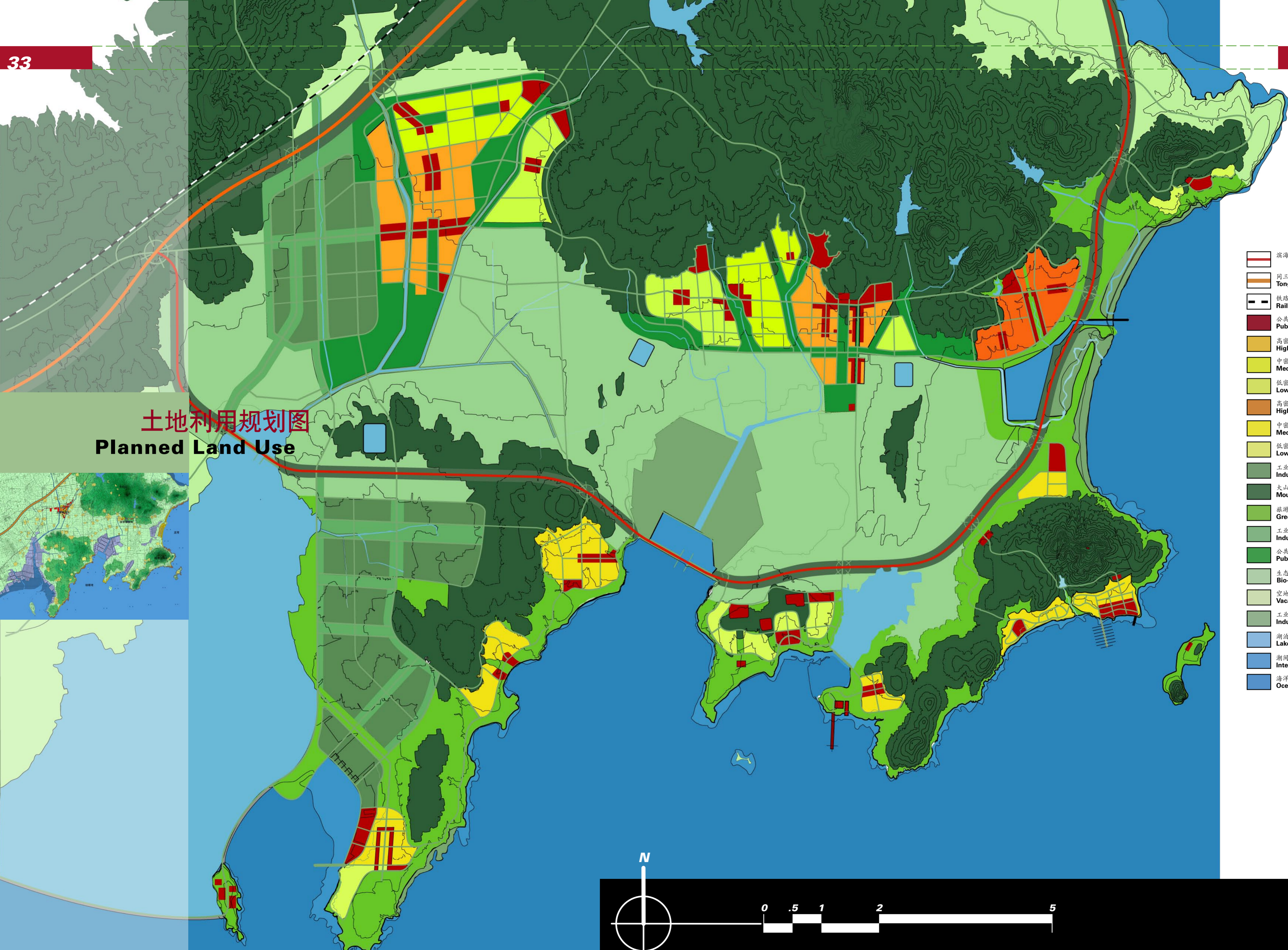


用地现状图
Existing Land Use

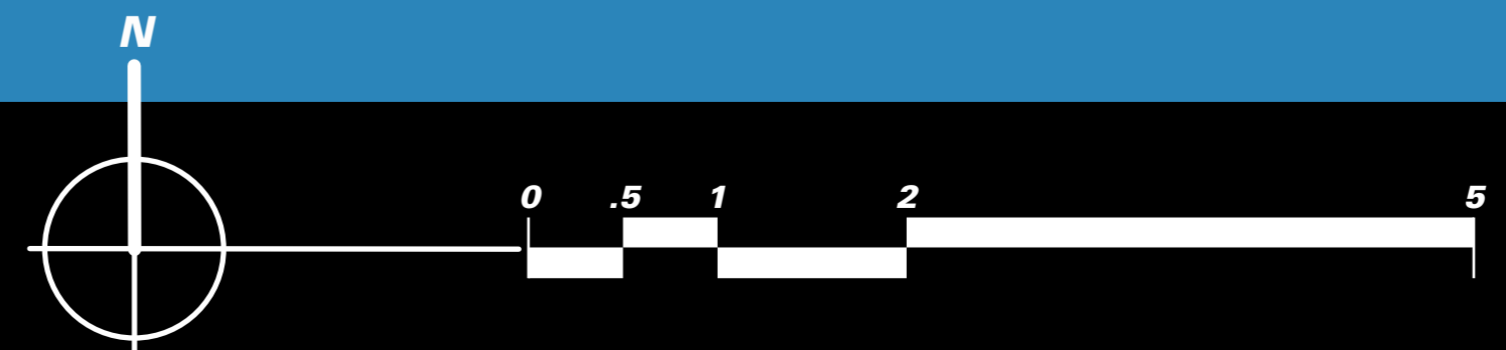
- 二类居住用地
Second Class Residential
- 公共设施用地
Public Infrastructure
- 教育科研用地
Scientific Research
- 仓储用地
Storage
- 产业用地
Industry
- 同三高速公路
Tongsan Expressway
- 村庄居住用地
Villages
- 生态绿地
Bio-eco Greenland
- 水域
Water Surface
- 空地
Vacant Land
- 滩涂
Sludge Area



土地利用规划图
Planned Land Use



- 滨海公路
- 同三高速公路
Tongsan Expressway
- 铁路
Railroad
- 公共设施
Public Infrastructure
- 高密度住宅
High Density Housing
- 中密度住宅
Med. Density Housing
- 低密度住宅
Low Density Housing
- 高密度旅游区
High Density Tourism
- 中密度旅游区
Med. Density Tourism
- 低密度旅游区
Low Density Tourism
- 工业
Industrial
- 大山和原野
Mountains & Wilderness
- 旅游绿地
Green Land For Tourism
- 工业绿地
Industrial Green Land
- 公共住宅绿色园区
Public Green Residential
- 生态绿地和农田
Bio-Eco Green & Farmland
- 空地
Vacant Land
- 工业绿地
Industrial Green Land
- 湖泊和河流
Lakes and Rivers
- 潮间区
Intertidal
- 海洋
Ocean



确定和限制都市发展的边界是保持山和海的自然连接和秀丽景观之关键。

组团内东海岸沙滩和海滨陆角将作为公园加于保护。

琅琊镇和泊里镇的城市公园是组团内山和农业绿地景观的自然连接。

绿色农业是组团内北部山岳和旅游园区的重要缓冲带。

城市内和工业园区周边的绿化带和绿色小区是地表水重要的生物过滤区。

车轮山度假区可俯视龙湾和遥望琅琊台,视野开阔,美不胜收。

新规划的水晶城将整体面向琅琊公园和琅琊台。

山海公园的山林是一片绿色保护区,它对车轮山和水晶城的景观和美学价值意义重大。

琅琊镇市政府大道穿越农业景观区,连接海洋研究所和海滨陆角。

泊里镇市区建筑俯瞰着组团的绿色景观带和南头港。

所有社区周围的水系都有绿色缓冲带,防止水土流失和水质污染。

所有的旅游度假区都环绕着生态绿地和大海,自行车道穿梭于生态绿地和公园之间,人们可自由享受山川和大海的美丽。

组团内所有的水源都受到严格的保护。

生态, 视觉景观和绿地分布 Ecology, and Views and Open Space

Strong Mountain to Ocean connections are maintained by Urban Growth Boundaries.

The East Coastal Beach and Headlands are protected as parkland.

Mountains are connected to eco green lands through urban parks in Lang Ya Town and Boli Town.

Green agriculture serves as a buffer between northern urban areas and tourism resorts.

Green zones in urban and industrial neighborhoods also serve as bio filtration for surface water.

The Chelun Mountain Resort has striking views of Dragon Bay and to Lang Ya Tai.

The retail core of Crystal City is oriented to the park and views Lang Ya Tai.

Mountain to Sea Park acts as a large green reserve that enhances the views and value of both Chelun Mountain Resort and Crystal City.

The City Hall Boulevard of Lang Ya Town orients, over farmland, directly to the Marine Institute and the Ocean Headlands.

The civic structures of Boli Town enjoy a green view toward South Point, south over the boulevard.

All waterways associated to populated areas maintain a green buffer area.

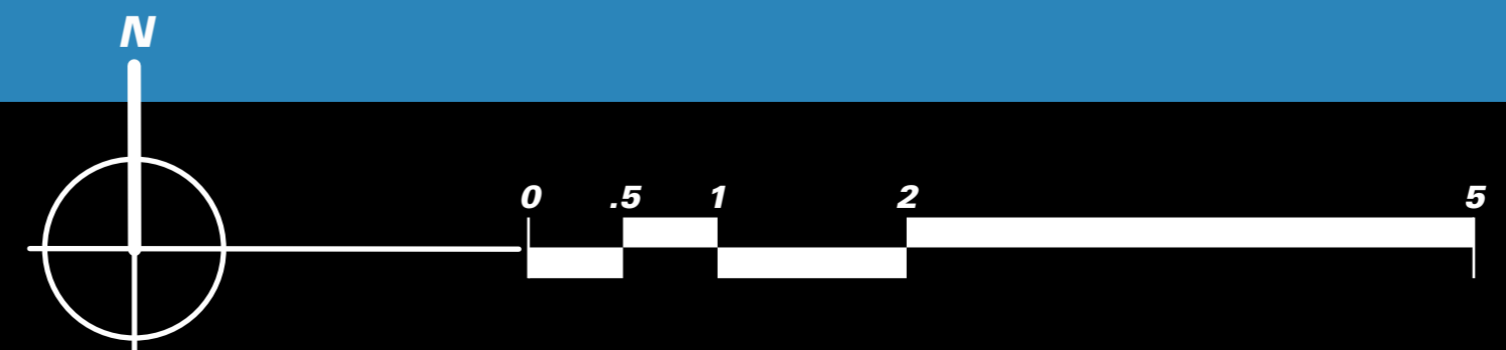
Bio eco green land and the sea surround resort areas.

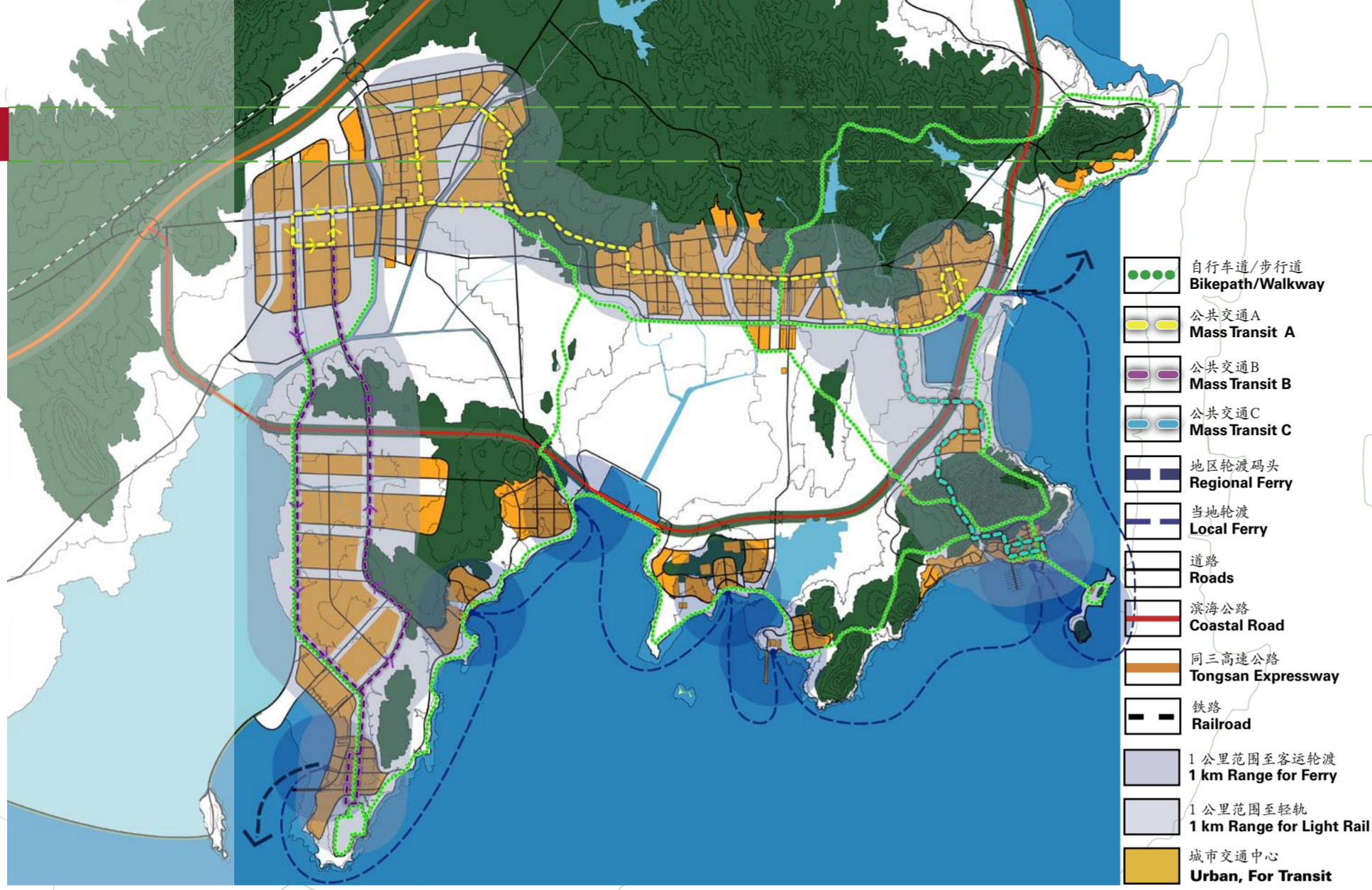
Bicycle paths travel through green land and parks, with many views to the mountains and to the sea.

The domestic water supply is protected in all areas.



- 自行车道/步行道
Bikepath/Walkway
- 滨海公路
Coastal Road
- 同三高速公路
Tongsan Expressway
- 铁路
Railroad
- 工业
Industrial
- 大山和原野
Mountains & Wilderness
- 旅游绿地
Green Land For Tourism
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- 公共住宅绿色园区
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- 空地
Vacant Land
- 沙滩
Beach
- 湖泊和河流
Lakes and Rivers
- 潮间区
Intertidal
- 海洋
Ocean





交通: 综合规划

Transportation: An Integrative Approach

卡车和私家车的快速增长将给中国的道路系统和生活质量带来深远的影响。车辆的增多方便了人们的交通,可以促进经济的增长,但给基础设施带来了许多挑战。我们仍然希望技术的不断发展可以减轻污染和其他环境问题。新式发动机,如配有空气质量管理系统,混合动力、电力、燃料电池及其他发动机,也许会恰巧在中国需要它们时进入市场。我们预计琅琊组团的发展将会遇到各种重型运输车和私家车交通阻塞的问题。如果汽车成为人们交通的主要方式,道路建设速度便很难跟上汽车的增长,在人口密集的地方,情况尤其如此。由此合理控制汽车增长速度及创建合适的公共交通工具和方式是十分重要的。根据美国的经验,如果汽车是地区的重要交通工具,那么,公路建设是跟不上需求的增长,不断筑路又反而造成更严重的交通阻塞,这种恶性循环对一个地区的经济破坏巨大。我们期望我们的城市发展和交通规划可以避免出现上述情况。

我们围绕可持续性的理念来规划琅琊组团的交通运输系统,给整个地区的人们及游客于多种交通方式的选择,并使不同收入水平的人们能用得起不同的交通方式。整个交通系统对私家车及公交车道路、轻轨、自行车道、人行道、当地客运轮渡和地区客运轮渡等方面都作了综合系统的规划设计。

The rapid growth in truck and private automobiles will have a profound impact on China's road networks and quality of life. While personal freedom and a great potential for economic growth comes with such vehicle ownership, many infrastructure challenges result. We remain hopeful that evolving technologies will mitigate pollution and other environmental problems. New engine choices such as vehicle air-quality management, hybrid (electric-gas), electric, fuel cell engines and others, will come of age coincidentally with China's demand for such individual vehicles. We anticipate this growth in heavy commercial and personal automobile traffic will coincide with the development of Lang Ya City Group. It will be difficult to keep up with road construction if cars become the primary source of commuting and general people movement, especially with dense populations. It is therefore extremely important to plan for such growth and the pattern effects by creating a network of desirable alternative methods for moving people en masse. From lessons in the United States, if the automobile is defined as the primary source of intra-urban transit, road construction alone will not keep pace with demand; the continual congestion caused by road upgrade cycles are hugely disruptive to an area's economy. We anticipate that our urban growth and transportation approach will provide a practical alternative.

The transportation system has been organized around the ideals of sustainability, providing attractive options for commuters and tourists in all areas of Lang Ya City Group, and offering access to people of all financial means. The system integrates roads for private vehicles and buses, light rail, bicycle trails, pedestrian walkways, local passenger ferries, and links to regional passenger ferries.

道路系统

滨海公路和同三公路是琅琊组团的主要路网干道。滨海公路连接着组团内许多景点和旅游度假村,是主要的观光旅游大道。为平衡控制交通流量和方便参观游览的需要,一般每隔两到三公里设一个交叉路口。当然这并不是一个限制车辆的高速公路。但工业卡车应禁止上滨海公路。另外,一条优美的辅路将沿海岸蜿蜒,连接滨海旅游景点。同时,公路西边绿化带所种植树木应以当地种类为主,它们应不需要额外浇灌。

道路规划中,我们设计了两条并行的二级公路,它有利于控制车流和紧急情况。通过城区和度假区的道路,我们设计一条线路直串城区,另一条绕城而建。在工业区,复式公路连接了两个工业区并通向南部港口区。最西端的轻型及中型工业区(7.5)的道路可看到沐官岛水库,因此即可用于工业运输,又可用于旅游业。

Road System

The Tongsan Expressway and the Coastal Road are the regional links to the Lang Ya City Group. The Coastal Road is the primary scenic tourism route and links resort areas. To balance traffic flow and access to the area's attractions, intersections are generally 2 to 3 km apart; however, this is not a controlled access highway. Industrial truck traffic will not be allowed on the Coastal Road roadway. A scenic secondary road will wind along the coast and connect coastal areas of interest. Green belt plantings along roadways should be focused on indigenous plant choices that need no additional irrigation.

Our road plan includes a pairing of secondary roads for flow management and emergency alternatives. In urban and resort areas this pairing generally has a central business route and is complemented by a periphery bypass alternative. In the industrial area, dual roads link the two industrial zones, and provide an avenue to the South Point area. The westernmost access road in the Light and Medium Industry area (7.5) has a view of Muguando Reservoir, creating a dual-use for industry and tourism.



轻轨

轻轨是我们这份总体规划中用的词,指以基础交通系统为优先的概念。它的具体形式有轻轨、电车或有限的专线客车。确立并保持其优先权的规定是十分重要的,具体技术则可进一步研究和确定。

Hans Blumenfeld's public transit research results show that population densities greater than 4,600 people per square kilometer are needed to support mass transit feeder lines. A benefit to our growth boundary plan is that all population areas served by light rail lines exceed this minimum, and in the densest zones, exceed the minimum by more than 300%. Almost all the population served is within 1 km walking distance of a light rail line. In addition, virtually all of the industrial zones are within 1 km walking distance of a light rail line. A third segment of the light rail system provides access to Lang Ya Coastal Park.

Light Rail

Light rail is a term used in this master plan to denote right-of-way based transit, which can be in the form of light rail, tram or limited guide-way buses. For purposes of this master plan, it is critical that the rights of way be established and preserved; the particular technology can be selected after a more detailed investigation.

According to Hans Blumenfeld's mass-transit studies, population densities greater than 4,600 people per square kilometer are needed to support mass transit feeder lines. A benefit to our growth boundary plan is that all population areas served by light rail lines exceed this minimum, and in the densest zones, exceed the minimum by more than 300%. Almost all the population served is within 1 km walking distance of a light rail line. In addition, virtually all of the industrial zones are within 1 km walking distance of a light rail line. A third segment of the light rail system provides access to Lang Ya Coastal Park.

交通图上的浅灰色区域为距轻轨线一公里的范围。系统内的单行线用箭头标明。借助当地及地区轮渡系统,几乎所有市民和游客距大众交通线的距离都不超过一公里(不考虑未来公共汽车线路)。黄线标明人口最密集的地区(占城市总人口的85%)。紫线是往返工业区的交通线及游人前往南部港口村(5.3)的线路。蓝线连接了黄线通往大众旅游村(1.2)琅琊公园村(1.1)和琅琊公园设施。

The transportation map shows the 1 km light rail access areas in light gray. One-way loops in the system are denoted with arrows. Combined with local and regional passenger ferry links, almost all residents and visitors are within 1 km walking distance of mass transit, not considering potential bus routes. The Yellow Line serves the densest urban areas that constitute 85 percent of the city group's population. The Purple Line provides commuter access to the industrial areas, as well as tourist access to the South Point Village (5.3). The Blue Line connects the Yellow Line to Affordable Tourist Village (1.2) and Lang Ya Park Village (1.1) and Lang Ya Park facilities.

客运轮渡

沿海相对平静的水面提供了高效而吸引人的水上交通运输系统。当地客运轮渡可以连接所有滨海度假城镇——水晶城(2.0)、海洋所(1.3)和南头村(5.0)。除满足基本交通需求外,当地客运轮渡可以方便游人游览各旅游景点、琅琊台美景、沙滩和度假区。轮渡码头也创造了经济活动中心。搭乘地区轮渡可前往水晶城(2.0)和南头村(5.0)。人们还可以通过观光游船到青岛市区和青岛港,或甚至水陆联运到机场。

Passenger Ferries

The relatively calm waters on the coast create an effective and tourist-attractive link in the transportation system. Local passenger ferries interconnect all coastal resort towns, Crystal City (2.0), the Marine Institute (1.3) and South Point Port (5.0). In addition to providing basic transportation needs, the local passenger ferries provide tourists a convenient overview of visitor attractions, scenic views of Lang Ya Tai, beaches and resorts. Ferry terminals also create focus zones for economic activity. Regional ferry service provides links to Crystal City (2.0) and South Point Port (5.0). This makes it possible for efficient and scenic waterway access to Qingdao and perhaps to the international airport.

自行车道

自行车道是为游人及当地居民设计的。作为一种替代交通方式,骑自行车旅行可以减少路上的机动车辆,并鼓励人们进行锻炼。在只有自行车道的地方,如琅琊台的东部坡地,自行车道要能通行急救车辆。设计自行车道时要考虑地形、自然风景及其连接城区和其它景区的便利性。例如,琅琊镇和琅琊台之间的自行车道是最短最开阔的,它直接从美丽的农田之间穿过。

Bicycle Paths

Bicycle paths are designed for tourists as well as local residents as an alternative to other forms of transportation, thus reducing automobile traffic and encouraging the benefits of exercise. In areas accessible only via bikeway, such as the east slope of Lang Ya Tai, the bicycle path will be designed to accommodate emergency vehicles. The bicycle routes were designed considering typography, scenic beauty, and to provide efficient access among the urban areas and other areas of interest. For example, the bicycle path between Lang Ya Town and Lang Ya Tai is the shortest and most open route, through scenic farmlands.

步行道

所有的步行道应考虑其是否便捷、风景是否秀美以及是否安全。比较有特色的步行道有水晶城海边的木栈道(2.1)、龙湾及琅琊公园海滨陆角的木栈道。市区的步行道增强了城市的特色和舒适程度。

Pedestrian Walkways

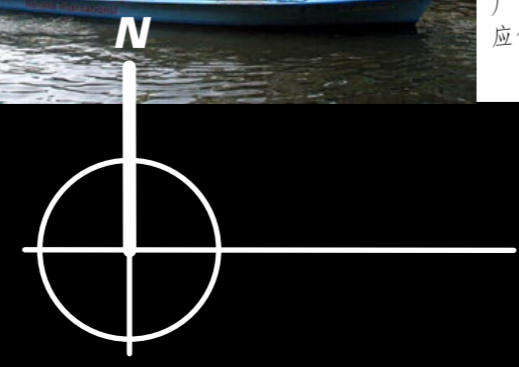
Efficiency, scenic beauty, and safety should be considered in all pedestrian walkways. Special walkways include boardwalks at Crystal City's Marina (2.1), along Dragon Beach, and marine headlands in Lang Ya Park. Pedestrian zones of all urban areas improve the character and comfort in neighborhoods.

铁路

应在计划区域铁路线和重工业及中型工业园(7.3)或者南头港口(5.0)之间优先考虑设计建设一条铁路支线。这条支线将为那些需要大宗货物运输或送货的厂商提供服务。一旦区域铁路提供客运,我们应建一条连接黄线的轻轨。我们应优先论证建设这条轻轨的可行性。

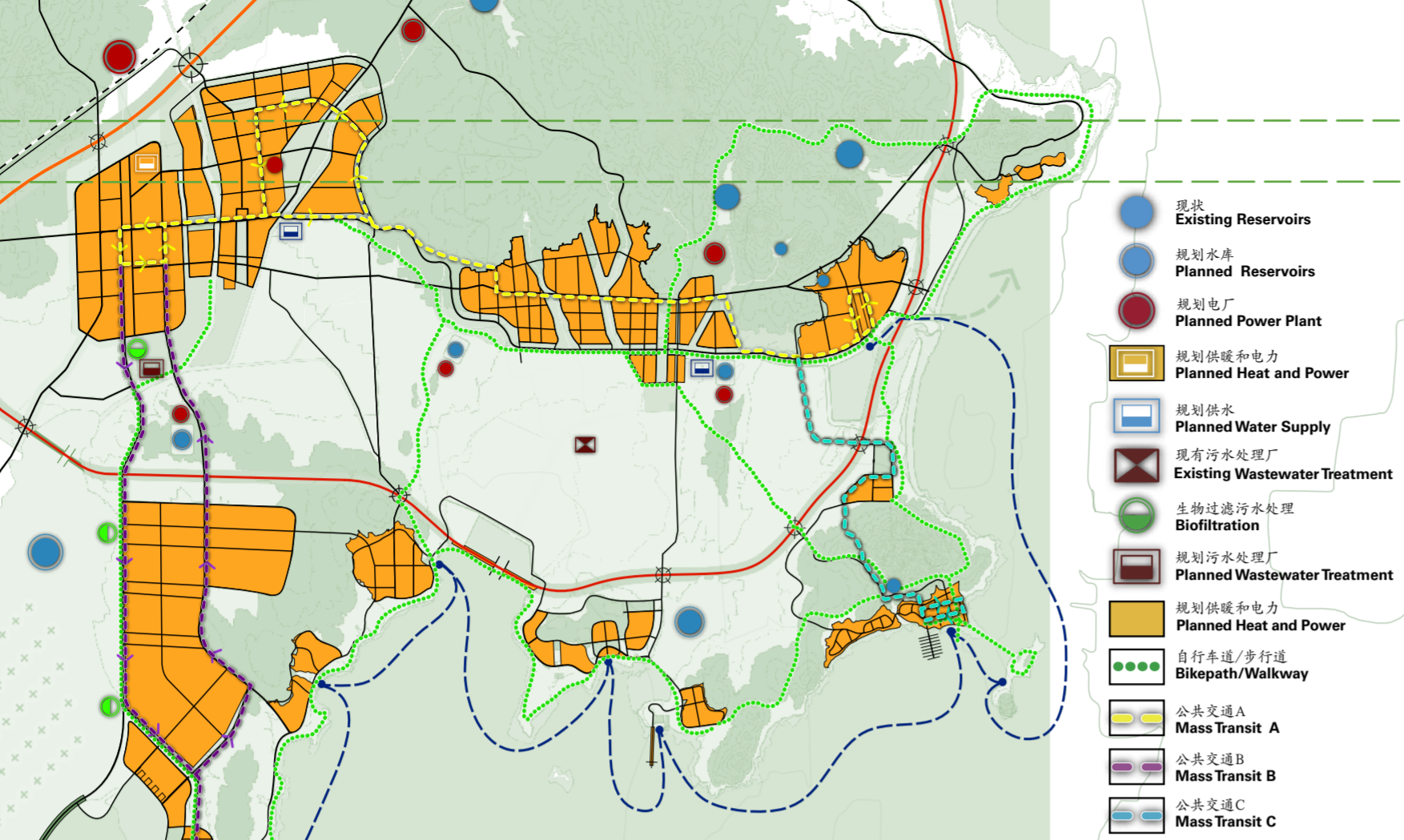
Railroad

The right of way for a potential railroad spur should be designated between the planned regional railroad and the Heavy and Medium Industrial Park (7.3) and possibly to South Point Port (5.0). This railroad spur would serve manufacturers requiring large bulk deliveries and shipments. Should passenger rail service be established using the regional railroad, a light rail link to the Yellow Line should be constructed, and right of way should be defined for this possibility.



预防自然灾害的规划,融和于琅琊组团总体规划的整体考虑之中。区域分界和区域安全是我们的首要考虑。我们的规划包括:限制在泛洪区内不搞建筑,限定的一定的海拔高度作为城市发展的上限和建筑高度限制;还有充分利用绿地和开闢地作为紧急疏散人口用地等,都是基于区域安全的考虑。我们从城市人口的规划以及城市建筑空间和高度布局,考虑对地震或其它自然灾害情况下的人口疏散和其它紧急措施的实施。同时,我们在人口密集的地区都设计了至少两个以上的紧急出口,包括工业区等地所设计的双道高速公路,都是基于这种紧急疏散的安全战略考虑。我们的规划中,尤其重视滨海地区预防自然灾害的设计,比如,滨海低地与高地的连通和便利疏散的道路。我们所设计的绿地和综合水系都是整体规划中对自然排放的畅通、预防洪水和海潮海啸等自然灾害的全面考虑。显然,在建筑设计标准中,我们应该认真考虑建筑的防火和防震性能。

我们的规划还突出考虑了在人口居住区、工业区和其它重要保护区防止火灾的战略实施。比如,我们在琅琊台的北门设计了一个消防站,这个消防站离滨海公路近,不但担负公园的防火任务,也负责滨海沿线邻近各地区的消防。我们要求,北部城市的消防站还应培训和担负起高楼营救的任务,以满足消防救火和反恐的需要。这种需要和要求对于水晶城将会更突出。我们所设计的社区中心,包括了社区生活的便利,也突出社区紧急救援、医院急救护理、救火消防等等。另外,我们所设计的自行车道都要达到能通救护车和救火车的标准。这种投入成本小、多功能利用和网络化,对这个区域的自然灾害防治都会起非常关键的作用。生态绿地和农业区域的规划,减少了城市火灾的可能性,也使各城区之间有了隔离带。对都市火灾的预防,也是区域安全规划的一部分。



Natural Disasters

The planning for natural disasters is integrated throughout the Lang Ya City Group plan. Our recommendations include: building above the floodplain as protection against floods and flood tides; limiting construction areas to within urban growth boundaries to provide immediate access to open and more elevated lands near urban zones. Particular care has been taken in coastal areas, providing a second evacuation exit on higher ground. These dual or multiple road patterns offer efficient evacuations when required, always with back up routings for emergency vehicles. We have recommended extensive use of green zones along natural waterways, and have defined the master plan in relation to natural drainages, minimizing damage from potential flooding. Obviously all-new construction must have a high standard for fire and earthquake protection. All populated areas have been designed with at least two primary and many secondary exits for emergency evacuation.

Fire departments should be placed strategically in populous areas, the industrial zones, and areas near important sites. For example, we have recommended a fire department at the north gate to Lang Ya Tai, providing protection to the park, and allowing easy access to the Coastal Road to assist in fires in other areas. Fire departments in the northern urban areas should be capable of rescuing people at the highest floor of buildings – special attention must be taken in Crystal City. The urban centers are defined by neighborhoods and adequate public facility areas are located in and near each neighborhood for fire, hospital and other emergency vehicles. All bike paths have been specified to accommodate emergency vehicles, including fire vehicles and ambulances. Creation of bio-eco green zones and parks, as well as the farming methods recommended, minimizes fire potential in non-urban areas and creates distinct separation for urban areas.

Electric Power and Heat

We approached the need for electric power growth from several points of view: fossil fuel and cogeneration, hydropower, wind power, conservation and solar power. We recommend an incremental approach to integrating new systems and to evaluate the potential and cost effectiveness of alternatives: hydropower, wind power and cogeneration, before finalizing the design of new fossil fuel plants. Conservation is always recommended; solar power still remains marginal.

Fossil Fuel and Cogeneration

It is obvious to keep the existing fossil fuel plant in Boli operational until replaced with a state of the art fossil fuel facility before 2020. We recommend locating a new power plant north of the Boli industrial zone and near the new rail line, facilitating delivery of coal and other fuel sources, and offering a convenient location for industrial and domestic use. Cogeneration should always be considered in developing the new industrial complex. We have located the central heat generating facility in the heart of the Boli heavy industry area for efficient heat distribution and to maximize cogeneration potential.

Hydropower

Mountain reservoirs provide good opportunities for hydropower when combined with domestic water distribution; the consistency and management of both are synergistic. Also, careful design and positioning of new agricultural reservoirs will accommodate low-head hydro generators to supplement the electric grid. Wind power can mechanically lift water from Muguando Reservoir to higher agricultural reservoirs, thus creating a gravity distribution and elevation for the generators.

Wind Power

We recommend integrating the Muguando Reservoir with a large-scale wind farm, for both electric power generation and wind pumps for water distribution. We anticipate applying one-megawatt turbines, though the use of 1.5 megawatt generators and higher are becoming popular and should be considered; Germany is now building two-megawatt units off shore. A one-megawatt turbine will supply enough power for 1500 households. The protected and limited access zone of the reservoir supports construction and maintenance of the system. These dramatic structures can create the theme of “a windmill garden” and become a dramatic tourist attraction.

- 现状 Existing Reservoirs
- 规划水库 Planned Reservoirs
- 规划电厂 Planned Power Plant
- 规划供暖和电力 Planned Heat and Power
- 规划供水 Planned Water Supply
- 现有污水处理厂 Existing Wastewater Treatment
- 生物过滤污水处理 Biofiltration
- 规划污水处理厂 Planned Wastewater Treatment
- 规划供暖和电力 Planned Heat and Power
- 自行车道/步行道 Bikepath/Walkway
- 公共交通A Mass Transit A
- 公共交通B Mass Transit B
- 公共交通C Mass Transit C
- 地区轮渡码头 Regional Ferry
- 当地轮渡 Local Ferry
- 道路 Roads
- 滨海公路 Coastal Road
- 同三高速公路 Tongsan Expressway
- 铁路 Railroad
- 大山和原野 Mountains & Wilderness
- 湖泊和河流 Lakes and Rivers
- 潮间带 Intertidal
- 海洋 Ocean



Telecommunications and Internet

For Lang Ya City Group to be a viable tourism and business environment, high-speed Internet and effective telecommunications will be fundamental. With the extent of new rights-of-way and buried infrastructure, it will be relatively easy for high volume fiber optic cable placement.

Wireless Access and Internet Cafés

We recommend innovative high-speed wireless Internet for all tourism areas, wireless corridors on public transportation routes, with commuter vehicles having on-board servers for transition management. Ubiquitous Internet cafés should be abundant in the urban and tourism areas for tourists, and for residents who do not yet have personal Internet connections.

Additional Communications Considerations

Underground raceways should be built in rights of way to reduce future need to trench, allowing wires to be pulled without digging. Establishment of these rights of way are critical for implementation of future technologies. Light rail rights of way are recommended as trunk routes for telecommunications, since these lines are within one kilometer of most of the population. Lang Ya Town should be the digital and telecommunications hub of the City Group, which includes establishment of a large Internet Service Provider. The City Group should place a high priority on creating a multilingual world-class web site to drive tourism and investment traffic, and should take steps to ensure prominent Internet search engine placement.

Water

Water supply and water quality management are essential to the success of Lang Ya City Group. Our first point of clarification has been to distinguish the main watersheds into the industrial watershed and tourism watershed. All significant industry is located in the Boli Town watershed; all significant tourism is located east of the ridge in the Lang Ya Town and easterly watersheds. For reference we considered 2002 lation about water quality and water use.

Domestic Supply

We recommend directing existing mountain reservoirs to domestic consumption (85% of the planned population is nested near the mountains). Human activity should be diminished and monitored near the high reservoirs—this is the City Group's primary drinking water.

Agricultural and Industrial Supply

The new Muguando Reservoir should be reserved for both agricultural and industrial requirements; industrial and residential areas naturally drain into this reservoir, and reclaimed water can be managed here. Our plan shows three new agricultural reservoirs on upland farm plateaus, for gravity feed to agricultural lands; wind pumps should be installed to keep this gravity system supplied. All waterways and drainage will be protected, and will benefit from eco buffers.

Desalination

A research facility for studying the potential of desalination is located on Muguando Island, and could benefit from wind pumps. This source may become cost effective with evolving technology.

Wastewater treatment

We recommend different systems for industrial surface water, non-industrial surface water, and sewage. The confluence of the Boli drainage is an excellent site for treatment facilities, both for sewage and surface water. This area is also well suited for a water quality and natural resource management institute, monitoring the ecological effects of agriculture, industry and urbanization.

Surface Water Treatment

Following nature's own methods for cleaning water, a well-planned and maintained bio-eco filtration course must occur at all surface water flows. In the industrial zones a sophisticated bio-structure can be designed with sediment ponds, aeration, hazardous waste traps and managed wetlands for bio detoxification of industrial surface water. In urban areas, most of the surface runoff can be managed for decontamination from the source, using natural open streams, creeks and rivers. We encourage open watercourses, especially in eco-green belts. Polluting sources should be resolved at the source wherever possible. All the bio-eco green belts offer complimentary recreational and park environments in addition to their water quality function.

Sewage Treatment

We recommend consolidating the sewage processing into one regional facility, offering a significant improvement in water quality management and reuse. Two main supply lines are considered in our plan: one running east to west connecting 85% of the urban population to the Boli Sewage Plant; the second, along the Coastal Road, gathering the remaining Industrial, Tourism and Residential areas. Gravity lines are considered where possible, supplemented with pump stations. We also believe that there is adequate land area near the new plant to allow for transitional treatment, like spray irrigation, until the Lang Ya City Group reaches critical mass of development. Once tertiary water quality is assured, the water can be recycled for agriculture; the solid byproduct can also be reused if both heavy metal and contaminating bacteria are properly processed. Any areas used for surface spraying or solid waste detoxification must be strictly controlled to limit human access. We see phasing out the Lang Ya and other small processors towards 2020, once the new Sewage Treatment Plant is fully operational.

通讯和互联网

琅琊台要成为旅游发达、商业繁荣的地方,高速互联网和高效通讯是不可缺少的。随着公路的扩建,地下工程的增多,敷设大容量光缆会相对容易。

无线通讯和互联网吧

我们推荐在所有旅游区开设高速无线网络,在公交线路使用无线走廊,车上装载服务器,以便于移动管理。独特的互联网吧在市区及旅游区应非常普遍,以方便游客和家中未联网的市民使用。

其它通讯方面的考虑

其它通讯方面,应考虑建设地下电缆通道,减少将来道路开挖,方便布线。优先考虑建设地下电缆通道对未来通讯技术是十分重要的。鉴于大部分人们与轻轨的距离不超过1公里,我们建议沿轻轨建设通信主干线。琅琊镇将是琅琊组团的数字和通讯枢纽。它应建有一个大容量的网络服务器。琅琊组团应特别注意建立一个支持多种语言的网站,以加强宣传,吸引游客和投资者。此外,琅琊组团应逐步保证网络搜索引擎可以优先搜索到这个网站。

水

供水和水质量管理对琅琊组团的成功发展非常重要。我们首先把区域内的流域分为工业流域和农业流域。所有重要的工业都位于泊里镇流域;所有重要的旅游业都位于琅琊镇以东的流域。我们这里引用了北京2002年的统计数字,以作参考:农业用水59%,工业30%,居民11%。随着社会现代化的发展,居民用水会大大增多。我们应拟定计划,对人们进行水质和用水方面的教育。

居民用水

我们建议把现有山区水库划为居民用水水源(规划人口的85%靠近山区)。应减少并监控高海拔地区水库的人类活动;这些水库提供了城市组团主要的饮用水水源。

农业及工业用水

新建沐官道水库应留给工业和农业供水使用。工业区和居民区都向这里排放,通过处理得到回用。我们在农田区的高坡规划了三个新的农用水库,以借助重力自流,对农田进行灌溉。此地应安装风力驱动的水泵,保证重力自流系统的正常运行。所有的水道和排水渠都将加以保护,并借助生态缓冲区提供效益。

海水淡化

海水淡化可行性的研究机构将设在沐官岛上,它可以使风力驱动的水泵。随着技术的改进,海水淡化会变的经济可行。

污水处理

我们建议工业地表水、非工业地表水和生活污水采用不同的系统处理。泊里排水系统的汇流处便是一个生活污水和地表污水的理想处理场地。这个地方适合建立一个水质和自然资源管理所,监控农业、工业和城市化对生态环境造成的影响。

地表水处理

地表水的管理主要应采用自然净化方法。所有的地表水可经生态过滤程序处理。在工业区可设计建造一个复合生物处理厂,其中包括沉淀池、曝气池、危险废水收集池和控制湿地,用于工业废水的生物降解、消毒。市区的大部地表溢流可以通过小溪、河流、明渠等自然净化。建议多设明渠,尤其在绿化带中。只要可能,废水应在污染源处进行处理。生态绿化带除具有净化水质的作用外,还具有娱乐的功能,可开辟为环境公园。

污水处理

我们建议集中处理区域内的污水,以方便水质管理和回用。我们规划了两条主要管道,一条由东往西至泊里污水处理厂,它收集了85%人口的生活废水;另一条沿滨海公路敷设,收集其它工业区、旅游区和居民区的污水。管道要尽可能采用重力自流,需要的地方加以泵站提升。我们还认为,在琅琊组团大发展之前,新污水处理厂附近会有许多空地,可以利用这些空地,采用喷淋方法净化污水。水处理后的固体物和污泥,应进一步处理去除重金属和污染细菌,并加以利用。所有用于地表喷淋或污泥消毒的地方必须严加控制,限制人们接近。在新污水处理厂正式运行后,2020年前琅琊及其它一些小处理厂便可关停。

基础设施 Infrastructure



电力和供暖

我们从几个方面考虑了增长电力的需要:火电、水电、风力发电、太阳能发电等。在最终决定设计新的火电厂前,建议逐步尝试新的发电系统,并评估比较风力发电、水力发电的潜力和经济效益。另外,我们建议认真研究使用天然气的可能性和潜力,尽快考虑铺设整个地区的天然气管道。我们始终提倡节约用电,并认为太阳能发电仍处在摸索阶段。

火力发电

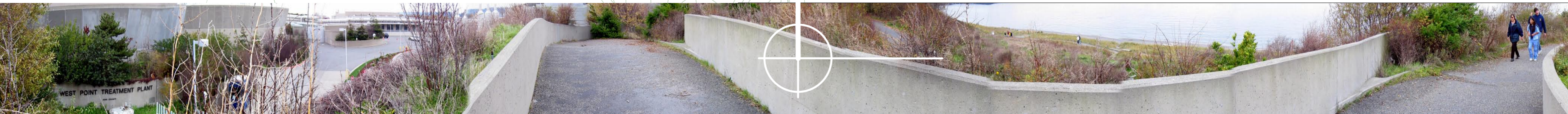
泊里的现有火力发电厂肯定要一直使用到2020年,直至有先进的火电设施替代它。建议在泊里工业园的北部靠近新建铁路线再建一个发电厂。这几运输煤炭及其它燃料非常便利;电力输送到工业区和居民区也很方便。在开发新工业区时,一定要考虑电力联网问题。我们把供暖电厂放在泊里重工业的中心,以方便输送及优化电力联网的可能。

水电

山区水库可以结合供水系统一起提供水力发电。供水和发电的统一和管理是互补的。同时,我们合理设计定位的三个新农用水库也适用低水头水力发电机发电。另外,可利用风力从沐官岛把水提升到地势高一些的水库中,再通过重力自流,为发电机发电创造了落差。

风力发电

我们建议在沐官岛水库建立一个大型风力发电厂,用于发电和风力驱动水泵输水。我们预计可使用1兆瓦的涡轮发电机。1兆瓦的涡轮发电机可以满足1500户居民用电。尽管现在使用1.5兆瓦甚至更高的容量的发电机日渐流行,甚至德国已开发了2兆瓦的发电机,但我们还是建议使用1兆瓦。这对水库区域的保护及对游人的限制也便于系统的建设维护。这些巨大的设备可以创建一个“风车公园”,成为一个很有吸引力的旅游景点。



经济发展规划很重要的一条原则是在更新经济结构的同时保护现有的经济基础。要注意保护,重建和新建之间的平衡。其关键是考虑所有方面的可持续性。

2004年至2008年开发顺序

- 1. 确定规划方案
2. 建设基础设施
3. 开发主要经济引擎
4. 开发低投资经济支持区

确定规划方案

规划方案是一份详实的蓝图。它规定城市扩展的边界,建设预留带的位置,和基础设施的规模。规划方案必须在开发动工前完成。总体规划的每一个战略都必须落实到具体实施的规划方案上。

建设基础设施

对琅琊快速发展至关重要是通往青岛的同三高速公路和滨海公路的竣工。按照我们的方案,最西边的工业道路连接同三高速公路和南头港。这条路要早建,以便支持制造工业区的开发并带动沐官岛水库的建设。南头港(5.0)要建到能承接建筑货轮的船道。北部东西向干道连接水晶城(2.0),琅琊镇和泊里镇,亦需完成。并配套完成供电,供水,排水和电讯主干网的建设。一个气势磅礴的琅琊台公园大门应建在滨海公路的出口。滨海公路要新建通往琅琊公园村(1.1)和大众旅游村(1.2)的岔道。其它基础设施应根据先期开发区的需要顺序建设。

开发主要经济引擎

一旦基本定位阶段工程完成,就该着手车轮山度假区(1.5)的开发。为增加这一度假区的价值和完整性,开发工程应由一个公司通过投标承包。投标承包的方法也可用于其它重要的基础设施建设项目。承包车轮山度假区的公司要尽快完成豪华宾馆,矿泉疗养所和高尔夫球场的建设。这一项目是向未来投资者们展示琅琊组团投资良机的关键。

When considering the development plan, it is important to upgrade the economy without destroying the existing economic base. The issues of preservation, reconstruction, and new construction must be balanced. Consideration of all forms of sustainability will be key.

Development Sequence 2004 to 2008

- 1. Define the plan
2. Build basic infrastructure
3. Develop major economic engines
4. Develop support areas requiring lower capital outlay

Define the Plan

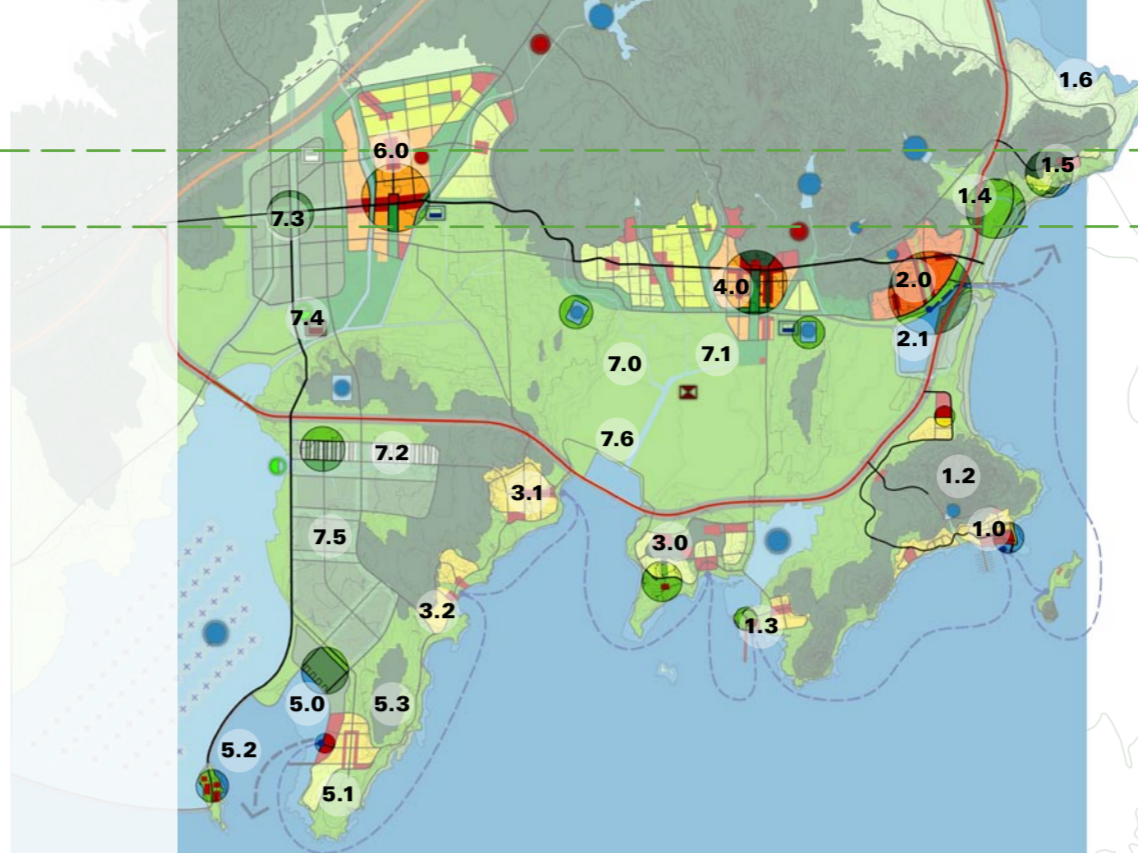
A detailed blueprint defining urban growth boundaries, rights of way, and basic infrastructure must be in place before development begins. Every strategy of the master plan must be developed into detailed tactical plans.

Build Basic Infrastructure

Completion of the Tongshan Expressway link to Qingdao and the Coastal Road are critical to the rapid development of Lang Ya City Group. Within the plan, the western-most industrial road connecting Tongshan Expressway to South Point Port should be completed to support manufacturing development, and to facilitate construction of Muguando Reservoir. South Point Port (5.0) should be developed enough to accept construction barges. The northern east-west artery connecting Crystal City (2.0), Lang Ya Town and Boli Town should be completed, along with primary power, water, sewage, and telecommunications links. A dramatic Lang Ya Tai park entrance should be created just off the Coastal Road; new bypass access roads from the Coastal Road to Lang Ya Park Village (1.1) and Affordable Tourism Village (1.2) should be constructed. Other infrastructure to support the initial development should proceed as required.

Develop Major Economic Engines

Once the definition phase is complete, rights to develop Chelun Mountain Resort (1.5) should be initiated. To increase the value and perceived exclusivity of this resort, development should be awarded to only one company via a bidding process. The proceeds from the bid can be used to create the infrastructure for other high priority projects. The developer of Chelun Mountain Resort should be encouraged to develop the hotel, spa and golf course as soon as possible. This will be a key setting to present opportunities to potential investors of Lang Ya City Group.



2008年至2020年开发顺序

- 完成水库系统的建设,包括沐官岛水库。
启用新的污水处理设施。
大规模应用无土栽培技术和温室。
完成水晶城(2.0)主体和滨海建设。
扩展重、中、轻型工业。
完成二级道路网,公交轮渡码头和自行车道的建设。
开始大型风力发电场建设。
安装轻轨:黄线先上,紫线第二,兰线第三。
完成大众旅游村(1.2)的主体景观建设。
更新海洋研究所(1.3)设施及其服务社区。
完成所有渔业的基础设施。
开始建设企业旅游村(3.1)和南岸旅游村(3.2)。
继续改善和扩建琅琊镇和泊里镇。
开发南头旅游村(5.3)

Development Sequence 2008 to 2020

- Complete the reservoir system, including Muguando Reservoir if it has not yet been completed.
Bring the new sewage treatment facility online.
Implement hydroponics and greenhouses on a large scale.
Complete the Crystal City (2.0) core and develop the waterfront (2.1).
Expand manufacturing capacity in all areas: heavy, medium and light industry.
Complete secondary road networks, passenger ferry piers and bicycle paths.
Begin large-scale wind power farm.
Implement light rail: yellow line first, purple line second, blue line third.
Complete core attractions of the Affordable Tourism Community (1.2).
Upgrade Marine Institute (1.3) facilities and the supporting community.
Complete infrastructure for all fisheries.
Begin construction of Entrepreneurial Tourism Village (3.1) and South Coast Tourism Village (3.2).
Continue upgrade and expansion of Lang Ya Town and Boli Town.
Develop South Point Village (5.3).

实施和政策

车轮山度假区的开发工程应由一个国际上享有声誉的公司通过投标承包。这将增加这一度假区的价值和完整性,也会为其辅助性建设带来最大量的投资。度假区的土地应在长期租借的方式下开发。

Implementation and Policy

The rights to develop Chelun Mountain Resort development should be awarded to only one internationally accredited resort company via a bidding process. This will increase the value and perceived exclusivity of this resort, and will provide maximum investment capital for supporting development. The land should be developed under a long-term lease.

水晶城是建设私有房地产的最佳地点。商业用房的租金要计为经营成本,但民居的私有者无需与别人分享房产的利润。按资本经济学理论,个人拥有和买卖房产的过程是价值增值的过程。比如说,商品房的价值,个人拥有的单元总比集团拥有的高。虽然集团也由个人组成,每个成员拥有整栋建筑的一小份。不论是个人拥有还是集团拥有,土地所有权都不是房主个人的,而是房产协会的。土地所有权的问题超出了城市总体规划的范畴。

Crystal City is a prime opportunity for private property ownership. Unlike commercial businesses that deduct leasing costs as a cost of doing business, private individuals do not share this benefit. It has been demonstrated in capital economies that greater value is created when individuals can own and sell assets. For example, the value of condominiums, where the individual owns the unit, is always higher than comparable cooperatives, where the individuals share ownership of the entire building. In both cases, the homeowner's association, not the individual, owns the land. The larger issue of land ownership is beyond the scope of city master planning.

应该建立一个港口管理机构来统管整个地区的港口设施。这样才能保证海洋生态保护的高标准。私营社团可以与该机构签约承包码头和港口的开发和管理。海洋研究所应综合指导所有渔业活动的控制和管理。这样才能保护海滨地带,提高渔业总的生产力和产品质量。

A Port Authority should be established to oversee and manage all port facilities in the region, to ensure a high standard for marine ecological protection. Private groups can then be contracted by the Port Authority to develop and manage marinas and ports. Control of all fisheries should be consolidated under direction of the Marine Institute to reclaim coastal areas and to improve the overall quality and productivity of the fisheries.

在工业园区中应不断安置国际贸易区。这是为了简化国际物资交流手续,减免关税,为投资者增加税务效益。工业和城市开发者都应享有税务优惠。政府与工业界有共同的目的,因此应当对工业产品免除出口关税和工商税。房地产税也应调整,以促进房地产开发。此类优惠政策应有一定的期限,以鼓励投资。根据各公司对地区经济可持续发展模式的贡献大小,某些优惠可以延期。判断贡献大小的要求指标必须是可计量的。

Foreign Trade Zones should be implemented in the industrial areas in an ongoing basis. The goal is to streamline paperwork for international transactions, to eliminate taxation of inventoried items, and to create tax benefits for companies investing in the area. Beneficial tax policies should be extended to both industrial and urban developers. Manufactured goods should be free of export fees and taxes based on shared goals of both government and industry. Property taxes should be adjusted for real estate development. There should be a minimum time period for these benefits to encourage investment, and certain tax benefits should be extended based on a company's performance in the areas contributing to the sustainability model. The requirements must be defined in terms of measurable objectives.

在计算投资的回收效益时,价值的得失不应限制在直接可见的数目上,而是要计入对可持续增长模式的影响。例如,无土栽培园艺的开发,不光要算设施建设的费用,也要算它节水的效益,减少食品长途运输的效益,及其它与可持续增长模式相关的因素。再如,节水的效益,不仅是为本项活动省了水,还为其它生产活动得以用水带来了更大的价值。

When calculating return on investment, an expanded definition of costs should be considered, to reflect the sustainability model. For example, the costs to develop hydroponic farms should not only consider costs of construction of the facilities. It should include macro-economic considerations of the offset to costs accrued from water conservation, the total costs of importing crops from distant locations, and other relevant sustainability factors. In calculating the value of conserving water, for example, the savings is not only in the lower water used for this method. The greatest value is in the other productive uses for the water saved.

经济可持续增长之重要,不仅在于吸引国内外的大财团。一项重要的任务是辩清和培育已有的社区经济活动,自然地培养企业,引导新的经济活动向已有的经济活动自然地“团聚”。协调这一过程需要一定的财富积累。因此必须调动一整套的经济活动,包括公有机关,大专院校,及社区私有企业的先行者。为了给琅琊组团规划出一个可持续的社区经济发展模式,我们在初级规划阶段就对可持续的社区经济发展模式进行了刻意的研究和阐述。

A key to sustainable economic growth lies not only with the attraction of large global or national organizations. An important activity involves the identification of and the nurturing of existing community economic activities, generally entrepreneurial in nature, and looking at natural "clustering" of economic activities that build on those existing economic activities. In order to marshal the assets needed to coordinate this project, a network of activities must involve traditional public sector agencies, university partners, and the leadership the community's private sector. In order to develop a model of sustained community economic development for Lang Ya City Group, building this model into the community's initial planning stages will be key.

开发过程: 时间顺序,优先次序和政策
Development: Sequence, Priorities and Policies

水晶城是未来经济引擎的重点。随着制造业的投资建设,大小投资者们都会对水晶城感兴趣。大财团会着眼于商场,码头和其它需要雄厚资金的项目。小商人会投资出租的公寓套房,开设各种商店,及其它服务性行业。一旦投资积累到一定规模,城市中心的开发,中心商城,和其它主要的房地产开发将带动各方面的开发建设。

Crystal City will be a key economic driver for the future. In concert with investment in manufacturing, Crystal City will appeal to large and small investors alike. Large investors will undertake retail development, construction of the marina, and other capital-intensive projects. Smaller investors will be able to purchase rental condominiums and develop various retail and other support businesses. Development of the city core, central retail mall, and other prime real estate will drive subsequent development once a critical mass is created.

开发低投资经济支持区

琅琊旅游公园(1)应该保护起来,重新绿化,并建设旅游基础设施。它是未来旅游和投资的重要引擎,需予以美化,在建设目标之一是方便游客进出。这个区已经成功地创建了公园的布局,未来继续向这个方向发展不需很多投资。

Develop support areas requiring lower capital outlay

Lang Ya Tourism Park (1) should be preserved, reforested, and tourist infrastructure developed. As a primary future driver for tourism and investment, the parklands should be beautified and developed in ways that enhance public access. Already this area has made great success in creating a park setting; it is a low cost way to continue the statement for the future.

琅琊镇和泊里镇拥有大部分的现居人口。市府大楼和其它重要政府机构,尤其是研究和培训机构,应与住宅区同步建设,避免位置上脱节。我们为新的市中心建筑群选择了特殊的位置,不会影响现有的状况。

Lang Ya Town and Boli Town contain most of the existing population. Construction of City Hall and other high priority government institutions, especially research and training institutions, should begin along with construction of dwellings in areas that minimize dislocation. We have recommended extraordinary sites for new central structures that minimize the effect on existing conditions.

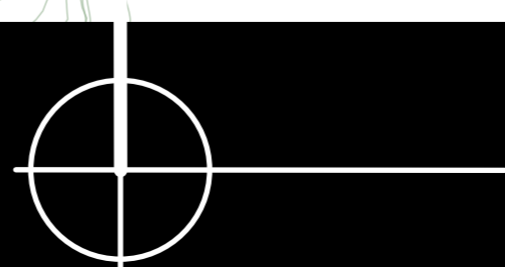
工业开发的重点应放在重工业投资上。这样可以吸收泊里镇和琅琊镇现有的工人就业。建设项目需要工业提供材料,如混凝土厂。建筑材料工业必须尽早上马。另一个优先开发项目是南头(5.0)的造船厂。它将带动渔业的发展。其它重点项目包括:

The first priority in manufacturing should be to seek investment in heavy industry, which will employ available workers in Boli Town and Lang Ya Town. Construction support industries, such as a cement plant, must be completed as soon as possible. Another high priority should be the shipbuilding facility at South Point Seaport (5.0) that will invigorate the fishing industry. Other priority projects include:

- 在琅琊公园村(1.1)建一个客轮码头。提供与青岛和胶南之间的快速客运。
鼓励手工艺人在琅琊公园村(1.1)开设作坊店铺。
为琅琊公园村(1.1)增长的旅游业和商业渔业建设基础设施。
建设海洋研究所的第一栋建筑和栈桥。
在中国园和日本园(1.2)开始栽种花木,给植物足够的造型时间。
在温泉度假村和滨海度假村(3.0)开始修建高尔夫球场。度假村的一期建筑应在高尔夫球场旁边。
开始新的可持续性农业耕作,包括无土栽培园艺。
测试和验证风力发电的可行性。
在水晶城(2.0)新建船厂只停泊的海水港湾,包括滨海公路桥。疏竣港湾的泥沙可用于水晶城址的填土。

- Construct a passenger ferry service terminal in Lang Ya Park Village (1.1) and initiate high speed passenger service from Qingdao and Jiaonan.
Encourage artisans to set up shops in Lang Ya Park Village (1.1).
Develop infrastructure to support greater tourism and commercial fishing at Lang Ya Park Village (1.1).
Construct the first building for the Marine Research Institute and its pier (1.3).
Begin plantings for the Japanese and Chinese demonstration gardens (in 1.2) to allow for plant maturation.
Begin development of a golf course at Health Spa and Resort Coastal Village (3.0). The first development should be along and near the golf course.
Begin new sustainable farming practices, including Hydroponics.
Test and confirm viability of wind farming
Construct the new saltwater boat basin at Crystal City (2.0), including the bridge required on the Coastal Road; use the dredge for fill at Crystal City.

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到2008年为止的开发目标是要展示经济,生态,文化及创造性可持续发展模式的优越性。以此积累一定的经济实力,足以带动自身的发展,并为下一阶段的开发吸引资金。

The goal for 2008 is to demonstrate the sustainability model for economy, ecology, culture and creativity. This will create the critical mass of economic activity that is self-sustainable, and will encourage investment in the next phases of expansion.

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