

Implementation of a Smart Neighborhood in the City of Urganch and Upgrading of Infrastructure Based on Eco-Technologies

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Abstract: This study covers the implementation of a smart neighborhood model in the city of Urganch and the renewal of urban infrastructure based on modern eco-technologies. The study substantiates the relevance of introducing digital control systems, energy-saving solutions, the concept of "green mobility", principles of sustainable urban planning and ecologically safe infrastructure elements. Within the framework of the proposed smart neighborhood model, smart solutions such as intelligent lighting systems, renewable energy sources, sensor-based monitoring, automated waste management system, bicycle and pedestrian lanes are integrated in accordance with the complex climate conditions. The results of the research show that development based on smart and eco-technological infrastructure increases the stability and efficiency of the city, reduces resource consumption and serves to create an environmentally safe, innovative urban environment in Urganch.

Keywords: smart neighborhood; eco-technologies; sustainable urban development; digital infrastructure; Urganch city; renewable energy; smart-mobility; green infrastructure.

INTRODUCTION

Current on the day world on a scale economic growth, urbanization of the steps increase to go and climate changes under the circumstances city infrastructure stable development issue current importance profession is doing. This point Uzbekistan in the cities, in particular, Urganch in the city innovative approaches based on smart neighborhoods current verb and from eco-technologies effective use important strategic from tasks one is considered Information - communication of technologies fast development, digital management of the means popularization and again recovering energy sources wide application city of the environment new generation smart - order passage the opportunity is creating. [19.]

" Smart" neighborhood " concept city infrastructure complex in a way modernization to do, the population life adjective increase, energetic to efficiency to achieve and ecological stability to provide own inside takes. Such in the neighborhoods intellectual lighting systems, sensors technologies, automated simplified services, re recovering energy sources and " green" traffic corridors like solutions compatible in a way integration This is done. and not only resource to save, maybe city of the environment ecological security to provide both service does. [1.2.18.20.]

Uzbekistan northern in the territories, including Urgench in the city climate conditions hot summer, cool winter and big heat losses with is described. That's it therefore, energy thrifty materials, smart - control systems and to ecotechnologies based infrastructure development this area for especially important is considered Eco-technological infrastructure of the city general stabilization, population prosperity and city of services adjective in progress big to the point owner. [14]

This research Urgench in the city smart neighborhood current verb theoretical - practical basics, eco-technologies with the help of infrastructure update capabilities, as well as smart networks of integration efficiency scientific in terms of analysis does Research results city environment stable and innovative to develop directed scientific and practical solutions work to go out service does.

1. Project purpose

Urgench in the city smart neighborhood current verb and ecotechnologies based on infrastructure update

The project purpose Urgench in the city Smart Neighborhood Model is to create. Today's on the day cities and neighborhoods in development new technologies current verb important importance profession Urgench in the city to do being carried out this The project is undoubtedly modern urbanization processes one part city of the population social, economic and ecological to the requirements answer gives. [20.]

Ecotechnologies based on infrastructure modernization this of the project central from the tasks is one Infrastructure update, first of all, energy efficiency increase and ecological stability to provide in view It is. for new technologies, such as solar panels, biogas devices, eco-water systems and other effective resources management mechanisms current will be done. Modernization done infrastructure, not only energy resources saving, but also the environment protection climate to changes against to fight, of the city ecological the situation improvement for both service does. [17]

Urgench Smart- Mahalla in the city model current verb, numeral of technologies current community safety, convenience and social services adjective in progress plays an important role. Digital management systems through to the population service to show efficiency increases. Example for the community security provision for special monitoring system and video surveillance mechanisms current This is and in the city crime reduction and of the population security to provide service does. [20.]

Also social of services quality both digital technologies through will improve. Local authorities and service indicator organizations between communication, standardized services to do increase, of citizens applications electronically reception to do opportunity is created. Of these there population for convenience create, their social environment with organ communication to install service does.

To the project being introduced ecotechnologies, as well as the city of the population to ecology was attitude to change help gives To people resources wisely consumption do, the environment protection to do, to repeat to renewable energy sources of passage importance about information to give These are necessary. everything Urgench in the city climate to changes against fighting, ecological stability to provide service does.

Energy efficiency, ecological stability and digital management current achievement, as well as the public safety, convenience and social services adjective increase through Urgench in the city new modern standards creation It is possible. project, from this besides, economic development, social stability and of the population life to the quality positive impact shows. Urganch in the city to do being carried out this The project is, of course, different to the cities sample will be and urbanization in the processes new stage starting to give service does.

Therefore, Urgench Smart- Mahalla in the city model current verb and ecotechnologies based on infrastructure modernization according to to do being carried out project, long within the deadline city development stable the base creation for important It is a step.

2. Project main directions

2.1. Informed digital management system (Smart Management)

Informed digital management system (Smart Management) is modern to technologies based innovative approach it is the cities socio-economic to the development big impact shows. Current " Smart " in the day neighborhood " concept within the framework created only neighborhood dispatching center community and local authority between contact improvement, service to show efficiency increase, and citizens problems quickly solution to do for intended. [20.]

If you live in place service indicator with organizations (electricity, water, heating, communications) integration about if we talk about it, this actions population for amenities create as well as public services effective management possible gives Integrated system through citizens their own service to the address related problems amenities with solution what they do For example, a QR code for a house passport current verb through every one of the house correct information created It will be. passports to citizens own their homes service indicator organizations with related all information ease with to take possible gives.

Electronic appeals platform both this in progress important to the point owner. Neighborhood citizens gathering for special work developed platform to citizens own applications in electronic form send possible gives. This their requests speed with seeing exit, answer to give and responsible organs with communication makes installation very easy. Citizens own problems effective solution to do, as well as the public in his work active participation verbs for convenient conditions will be created.

" Smart" of the " neighbourhood " concept main the purpose is modern from technologies used in case society develop, his social his life improvement and growth provide Informed digital management system through in the neighborhoods community problems to determine, to them worthy solutions search and citizens community to life active attraction to do for new opportunities opens. [1.]

So, informed digital management system (Smart Management) " Smart neighborhood " concept development, citizens effective management, and community services improvement on the way new to the stage take comes out These systems together local population for life quality and the conveniences in progress plays an important role. Innovative of technologies current being with, power and community between communication further It is strengthened and of the population life level to provide service does.

Also, this systems citizens activity increase their social in life participation strengthen, as well as local community their work fast development possible gives Informed digital management system (Smart Management) " Smart of the " neighbourhood " concept in the sale important tool as service does.

So so, QR - coded house passport, service indicator organizations integration with, and electronic appeals platform through local authorities and community citizens between effective communication established society to the developer big contribution is added. Local in teams this systems active current of citizens his life improve their rights protection to do, and community services new to the stage take exit for the purpose of important importance profession will.x 5yu'

2.2. Ecoenergy and resource efficiency

Eco-energy and resource saving : Sustainable development modern approaches

Global climate change and natural of resources decreasing to go ecology and conditions from energy effective use issue right now is very relevant at the moment. Ecoenergy not only alternative energy sources, but also resource saving to increase directed technologies both includes. This of the direction important from networks one many multi-storey cows on the roofs sun panels installation is 20–30 % autonomous energy supply provision possible gives. [4.]

Many multi-storey cows on the roofs sun panels

Many multi-storey buildings on the roofs sun panels installation in cities again and again popular It is going. approach not only electricity energy expenses but also reduces the carbon footprint both quite a bit to shorten help gives To such an energy source connected every one user up to 30% of its energy needs autonomous in a way to provide It is possible. especially resources shortage and conventional energy types of the price increase to go It is very important in the conditions. Also, the sun panels minimal service to show demand does and 25–30 years during service to do maybe this and to invest in them to the goal suitable does. [9.]

LED lighting and " smart " technologies

Energy saving ecosystem again one important aspect — city LED lighting on the streets systems current is to reach LED technology based on working " smart " street lights not only electricity energy noticeable to the extent saves, but also the environment to the conditions adaptation to the possibility both have For example, they are at night light strength to increase, during the day and decrease maybe this and traditional lighting to systems up to 70% energy saving possible gives. From this except, like this systems monitoring and management for other " smart " technologies integration with possible. [13.]

Heat to the isolation has facade materials and energy efficient window constructions

Energy efficiency of buildings in progress modern heat insulated facade materials and category A window from constructions use both important to the point have They are heat the loss sharp reduces and buildings inside convenient microclimate provides. Such technologies heating and to cool energy consumption reduces, this and utility expenses to decrease take will come Energy saving window investment in constructions both stable to the future directed important step is considered.

Energy consumption monitoring : Smart meter counters

Resource saving in the field promising from directions one is district level energy consumption monitoring for «Smart- meter », i.e smart counters system current is to reach These devices monitor energy consumption in real time observation possible gives, this and to users from energy conscious in a way use the opportunity present This is system not only expenses control do, but also energy consumption optimization according to recommendations to take possible both creates.

Conclusion

Ecology and resource saving technologies current verb stable to development to achieve important It is a phase. Many multi-storey cows on the roofs sun panels installation of LED lighting use, heat to the isolation have facade materials application and smart from counters use of these all energy consumption reduction and life sieve to increase a comprehensive approach aimed at forms. Ecoenergy and resource saving to the environment damage reduces costs saves and modern urban planning and of architecture inseparable to the part is spinning. Cities fast growing going and population needs increasing going one at the time, such initiatives to do increase desire not, but stable the future provision for It is a necessity.

2.3. Environmental infrastructure update

Ecological infrastructure update : "Green Neighborhood " concept

Modern cities are developing rapidly in the process to ecology harmful impact indicator factors considering to take necessary The concept of " Green Neighborhood " is every one of the city green territories update and ecological problems solution to do for effective solution is considered Within this concept row important events to do increase It needs a drainage system update, rain water collection and again work, local to the flora suitable trees planting, household waste initial at the source selection and biocompost containers organization verb like events enters.

Drainage system update

Drainage system in cities efficiency ecological infrastructure for perfect to the point have Drainage system update, oblarni collection and correct in a way management possible This is yours. in turn, rain water effective collection and later again work possible creates Drainage system modernization rain water collection systems with unification this is necessary and water resources savings and from them use optimize will take.

Rain water collection and again work

Rain water collection and again working - ecological infrastructure of renewal important from directions one. Such systems in cities water resources effective to manage help gives. Example for, collected rain water later on the farm use, that is gardening, maintenance and other needs for water, use resources to save take It comes. This is yours. in turn, ecological the effect to reduce service does.

Local to the flora suitable trees planting

"Green Neighborhood " concept again one important component is local to the flora suitable the trees is planting. Local species, for example, poplar, sycamore and city, town ecosystem in strengthening plays an important role. These trees not only city landscapes decorates, but the air quality, light, water resources with related problems in reduction both weighty to the point have Crops are exotic species instead of local types selection, bioscientific colorfulness to keep and territorial ecological balance sheet to strengthen help gives.

Household waste initial at the source selection

Household waste initial at the source sorting - ecological infrastructure of renewal again one main direction Waste from spending before, them to plastic, metal and organic materials separately to collect, to recollect work the process makes it easier. This is his in turn, waste amount reduction and resources again work efficiency to increase help gives.

Biocompost containers and organic waste devices

Biocompost containers and organic waste devices, organic waste in cities again of work effective is a tool. These containers through organic waste composting maybe this and them correct use and nature protection to do service does Biocomposting process as well as productivity increases i to nature positive impact shows.

Conclusion

"Green Neighborhood " concept to do increase ecosystem strengthening the environment protection to do and of our cities green territories to improve service does Ecological infrastructure update such initiatives and events to include necessary because they are the city environment improve resources effective management and ecological stability provision about effective solutions is considered In these directions the works to do increase of our country ecological prosperity for modern to the requirements answer gives. [6.13,]

2.4. Smart security and transportation system

Smart security and transport system : Innovations modern solution

Modern of cities development and of the population fast growth with together, security and transport systems efficiency important importance profession is enough Smart security and transportation systems, as well as the population for amenities creation for the purpose of innovative technologies current to do directed. Today's per day, 24/7 intelligent video surveillance, " smart traffic lights, pedestrians security sensors, electric power and bicycles for charging points, as well as in parking lots touch screen empty place determination system like elements modern cities mechanisms effective and safe in doing plays an important role. [2.]

24/7 intelligent video surveillance

Smart security of the system main from the components one is 24/7 intelligent video surveillance. This system of the city important places permanent in a way following goes and like that through to crime against effective struggle possible gives Intelligent algorithms with the help of cameras movements determination, monitoring of conditions and dangerous situations own on time determination possible creates. So as a community security increases and city population himself safe feeling will do.

" Smart traffic light" and infantry security sensors

Also, " smart traffic lights and infantry security traffic sensors and pedestrians security in providing important to the point " Smart " traffic lights the most active ones determination, community of transport movement optimization and pedestrians to pass for the conveniences in creation is used. Pedestrians security sensors and pedestrians movement automatically when changed traffic lights signal changes, this and pedestrians for your safety positive impact shows.

Electric scooter and bicycles for charging points

Smart transport system within the framework of electric power and bicycles for charging points current verb both important to the point owner. Today's per day, in cities ecological to clean vehicles demand increasing there is m o q da. Charging points supply provision and the population ecological effective to transport to pass encouragement It is very important for. This is, in itself, in turn, in cities weather quality and traffic to optimization help gives.

In parking lots touch screen empty place determination system

In cities of parking lots effective management and smart transport system important component is considered Sensory empty place determination system in parking lots empty real- time monitoring of locations possible gives. This as a result, to drivers they go need was the place determination will be easier and traffic congestion in parking lots reduces.

Conclusion

Smart security and transportation systems modern of cities in development plays an important role. 24/7 intelligent video surveillance, " smart traffic lights, pedestrians security sensors, electric power and bicycles for charging points, as well as in parking lots touch screen empty place determination system like elements, community security and transport efficiency in progress useful are processes. Such innovations of cities digital transformation providing, every one citizen for safe and convenient environment to create help gives.

2.5. Smart social services

Smart social Services : New Era navigation

Smart social services, that is modern from technologies used in case to do increasing social services of society all layers for important to the point owner. Today's on the day population needs satisfaction, services effective and fast in a way present verb for new opportunities appearance is happening Neighborhood in the center current smart social services, including

electronic queue, online doctor help, psychologist and social employees online-offline services with " Smart" Library ", youth for IT laboratory, robotics groups and others, of the population life type improving plays an important role [11.12.]

Neighborhood in the center located services, population interesting issues solution in doing efficiency increases. Electronic queue system to users service to take the process makes it easier. This service is in line standing on time expendable energy and the time exactly optimizes. Users through the Internet next in advance they receive maybe this and to them of services speed and efficiency provides.

Online doctor through telemedicine to the population medical services direct, efficient and convenient in a way present verb opportunity This service is being created to help people doctors with communication to do alleviates illnesses treatment, prevention and treatment processes under observation important importance profession is enough Online medical services, especially turnips or far away in places residence doer population very much for It is convenient.

Psychologist and social employees online-offline services with psycho- social of the population the situation to improve directed. This services, world on a scale problems, stress, depression and such as social isolation to issues effective solution offer is enough Psychological help, today per day, of the population social your health in strengthening important tool is considered.

" Smart " Library "- electronic book room, term press and online resources includes. This on the ground population knowledge increase and culture development for the purpose of modern technological from opportunities is used. Wi -Fi zone to users from the internet use possible gives, this and their knowledge to take the process relieves. In the library take to go events, spiritual and intellectual development for ground creates.

Youth for IT laboratory, robotics groups modern advanced technologies mastery and of the youth creativity development for wonderful opportunities present This on the ground youth, programming, robots create, design and other modern to the field due training programs according to education they receive can IT laboratories, young people between innovations development, collective work abilities increase and modern technologies in the process of mastering important tool is considered.

Thus, in the center of the neighborhood current smart social services of society social in development plays an important role. Modern of technologies effective use of the population needs in meeting, of services speed and efficiency to increase service does They were knowledge and opportunities, population further prosperous and to oneself characteristic life forgiveness possible creates Smart social services, undoubtedly, in our society new positive changes to dream to take out help gives.

3. Modernization of infrastructure composition

3.1. Engineering networks

Infrastructure is it every what of the country economic in development main from factors one. Modern during modernization of infrastructure, its all networks effective and stable to work provision for demand This is done. in progress engineering networks, water supply, sewage, electricity networks and internet networks like elements plays an important role. Har one structure his/her own unique requirements and opportunities with related and they modern to standards adaptation is important. [3.13.]

Water supply

Water supply in system modernization, first in line, pipes modern HDPE (Modified high to polyethylene) materials exchange it is necessary These materials his/her own high persistence, long fixed-term service to show opportunities and to corrosion against protection with separated HDPE pipes water supply in the system obstacles and mergers water to a minimum adjective to

improve help gives. Thus together, them installation the process is fast and effective, this and general expenses noticeable to the extent reduces.

Sewage system

In the modernization of the sewage system and 3- stage biofilter cleaning building current verb important to the point have This system is organic matter and harmful substances effective to clean provides, this and to the environment was the effect reduces Step by step cleaning process complete to detoxify directed being cleaned later removable water again use the opportunity gives of the system improved option and, high to efficiency owner and resources correct to spend provides.

Electric networks

In the modernization of electrical networks the most important from tasks one is modernized to insulated EN standard cables is migration. These cables high security to the level owner and electrical engineering protection to do and energy effective in the process of important importance profession This will make it possible. except for cables modern insulation their far fixed-term activity provides, this and repair and exchange expenses noticeable to the extent reduces.

Internet networks

Internet networks in the field of GPON optical lines current verb - this modern society for knowledge and information exchange makes it easier. GPON (Gigabit Passive Optical Network) technology high high speed internet connection tools provision with together, long in the distance users effective and economic in terms of use possible gives This system is just from the internet use making it easier not only modern socio-economic project and guidance both encourages.

Conclusion

Infrastructure modernization is a complex process is, every one engineering network to oneself characteristic solutions demand Water supply, sewage, electricity and internet networks modern to standards adaptation of the infrastructure efficiency increase and users for convenience creation possible gives these. to do increase, increase in turn, the country economic development and the environment protection to do service does Infrastructure modernization is just a technical process not, but the people's life to the quality impact doer social It is a task.

3.2. Accommodation territory reconstruction

Accommodation territory Reconstruction : New opportunities and social the environment improvement

Accommodation territory reconstruction is this only infrastructure update not, but of society social environment improve, live conditions optimization and city scary increase is a process. Today's on this day, of the project main purpose Uzbek of the people traditional values with modern requirements united in case social, economic and ecological stability from providing consists of. [9.10.]

In the process of reconstruction, the first in line, pedestrians the corridors natural stone with a walkway (eco-tile) update important to the point owner. Ecological correct from materials use, public transports and infantry for convenient the corridors creating an aesthetic appearance of the city to improve service does Pedestrians the corridors in renewal, eco- tiles not only appearance, but also innovative from technologies use, that is village farm products again work, water collection and again work system current to do like all processes cover will take.

Also children and youth the playground is this society future for important and responsible is an issue. During the reconstruction, the square rubber coating with provided that and children's security to provide service does. With that together, crops with shadow zones creation for

children convenient and healthy in the environment to play possible This is yours. in turn, the younger generation physical to the development positive impact showing ecological of education important to the factor It turns.

Accommodation territory in the reconstruction national-modern to the Mikhailovsky program in style appropriate architectural appearance restoration both important to the point have In architectural design, national methods modern technologies with integration of the city history and culture to cherish service does of buildings external appearance, internal location and function of the city cultural legacy considering received without, modern to the requirements answer to give need.

Very much cities own economic development and social stability provision for such reconstruction projects to do is increasing. Residence territory reconstruction, from this outside, population with work, social partnership development and public his opinion considering to take like important processes cover New projects to do population is increasing with open conversation take to go, their opinion and suggestions considering to take, society stable development in providing big importance profession will do.

Conclusion as in other words, Residence of the territory Reconstruction is a complex process is, it is a society of life all to the fields impact shows. Cultural inheritance preservation, ecology protection to do and modern to the requirements answer giving infrastructure creation is our general our goal. Residence territory reconstruction, only city only coal update not only, but his social environment to improve both service does.

4. Expected results

Informed services because of of the population satisfaction level increases.

Urgench in the city according to the republic first exemplary **smart neighborhood standard** is formed.

Modernization of infrastructure Composition : Harmonized Development The road

Modernization of infrastructure is modern economic of development main from the elements one of this process purpose of society social, economic and ecological needs provision as well as infrastructure objects efficiency with from management consists of Modernization of infrastructure is undoubtedly social and economic development accelerates and population life as positive to changes take comes.

In the process of modernization expected Results are very important. to the point owner. All over the world trends and technological from the news use, infrastructure modernization efficiency increase wrestler main factor as service does First, energy consumption is reduced by 25-35%. This and energy costs noticeable to the extent decrease and the most important, natural of resources effective to be used take comes.

Ecological pollution problem both in infrastructure modernization to your attention withdrawal necessary was important is an issue. Infrastructure improvement through ecological pollution is reduced by 20%. This and not only nature protection do, but the population health improvement, ecological security in providing both important to the point owner. Modern technologies and convenient infrastructure creation, clean and high energy efficiency decisions reception in doing help gives.

Community security also very important is an issue. Modernization of infrastructure through community safety is improved by 40%. Modernized infrastructure objects, including transport system, public cities and on time shown services, population security in providing plays an important role. Roads, bridges, public transport and other infrastructure elements of the population community security in providing important tasks will do.

Important from the results one is informed services because of of the population satisfaction level is to increase. Modern information technologies, electronic services and digital platforms,

population for convenient and effective services showing plays an important role. Modernization of infrastructure in the process, population interactive communication with installation, services facilitate and their efficiency increase for modern from technologies use demand will be allowed.

Urgench in the city according to the republic first exemplary smart neighborhood standard formation, infrastructure modernization again one important is the result. Smart neighborhoods, modern technologies and of innovation current to be done through, of the city socio-economic development provide, public security improvement and population adjective to increase directed. Also like this standards, other cities for sample as service to do possible.

Conclusion when doing, infrastructure modernization, economic development, environmental security, community security and population satisfaction in providing important to the point owner. From this outside, Urgench in the city exemplary smart neighborhood standards, this of the process efficiency increase for important from events one is, is not to the cities both own the effect to show can Modernization of infrastructure is society development for important and necessary It is a process.

5. Current verb stages

Phase I – Preparation (0–6 months)

Current verb stages of the economy stable development It is very important for. This in phase one how much main activities to do are increased, they are close future of projects success for foundation task passes. Phase I, that is Preparation stage, for 0-6 months to do increase necessary was important processes includes. At this stage mainly three main task to do is increased : the area selection, project -estimate documents work exit and international and local investors attraction to do. [3.4.5.]

The territory selection (500-1500 inhabitants)

The territory selection The process is very important because this project for foundation organization The territory correct selection, project success in providing settling down point will be. The area 500–1500 inhabitants in the selection owner was small cities or The districts are very convenient. Such in the regions economic activity development for opportunities many

Small population located in the areas, empty places and from resources effective use It is possible. This is your own in turn, investments attraction to do for convenient the environment creates. From this except, local population with close communication and cooperation install, to the project was interest increases and flexibility provides.

Project -estimate documents work exit

Project -estimate documents project of the stage adaptability provision for necessary mechanisms includes. These documents, to the project due all financial, technical and management processes to clarify help gives Project -estimate documents in writing, first next, the project purpose, address, used resources, needed funds, and project for need will be time with together, exactly instructions to include need.

Documents work exit in the process, experts team project concept clarification, clarification mechanisms creation and estimate calculations organization verb for necessary the information collection need. From now on besides, project -estimate documents international to standards suitable to be, this and investments attraction in doing important to the point owner. [3.4.]

International and local investors attraction to do

Preparation stage during international and local investors attraction to do important task is considered Investments attraction to do, project of success main factor become, mud

Phase II – Construction and installation work (6–18 months)

the second stage construction and installation works complicated and responsible the process organization. This in phase main the goal is infrastructure reinforcement and modern solutions current verb through functional and applicable the essence is to provide. Traditional construction from the methods except this Smart technologies in the next stage installation and engineering networks exchange need.

First, engineering networks exchange process complicated mechanisms includes. of this process purpose - old and ineffective engineering systems modern, effective and energy efficient or ecological correct solutions with is a replacement. An example for, many in cities water supply, electricity energy and gas supply like engineering networks, modern technologies through efficiency increase for again will be built. This is his in turn, reserves to save and to the environment negative the effect to reduce help gives. [13.]

Secondly, Smart technologies installation process both of the II stage important one part Smart technologies, i.e. " intelligent " systems, are used in construction building and facilities automation, monitoring and to manage simplifies. An example for, the energy consumption of the building optimization for the purpose of automated systems installation can Of these among " smart " projects, lighting, air exchange and other mechanisms place Installed Smart technologies to users convenience and efficiency increase with together, energy and from sources use noticeable in a way reduces.

Green regions building verb II stage again one important aspect is considered Green regions, that is natural landscapes to keep and nature with integration, city under construction ecological balance to keep It is very important for the building. and facilities construction in the process green integration of regions, environment protection to do help gives, population health improves and the aesthetic appearance of cities Green regions, as well as in cities weather quality, ecology and nature with population between contact improvement for both It is important.

Effective construction and installation works for effective team and necessary resources collection need Designing of the process every one in the phase cooperation, innovation and renewal provision important is considered Local and international to standards according to, construction in the process all dangers to your attention to take and them minimize need. From now on except, construction in the process public with your contact strengthening, apartments and teams thoughts considering to take both is important. [2.]

the second stage construction and installation works not only modern technologies current but also the environment protection to do and population health improvement for the purpose of ecological stability to provide both includes. At this stage effective strategies and innovative solutions current verb through, of construction all in stages high to the results achieve we can As a result, the city under construction modern, ecological correct and effective solutions appearance will be. Stage II successful implementation for engineering networks replacement, Smart- technologies current verb and green the territories building verb the process effective management necessary.

Stage III – Test exploitation (18–24 months)

Modernization of infrastructure process modern in the economy important importance profession is enough The III stage of this process is " Test " exploitation ". term of 18-24 months cover takes At this stage of the facilities efficiency, their use, technical precision and population for the benefit determination for the purpose of one row from the test conducting, training courses and assessment processes to do increases.

Synov exploitation during the period, first of all, systems from the test transfer process begins. This in progress new infrastructure elements or modernized systems all functions inspection comprehensive testing for methods is used. From the test transfer The process is usually defined

to standards suitable in a way to do increases and systems work efficiency assessment for documented protocols, algorithms and tables in the form of taken information based on will be held. This in progress technical indicators only not, but a human being factoring both to account to take is important. [3.7.9.]

Systems from the test transfer during the period, all of operations efficiency, their continuity and of use which to the extent to the population convenience is determined. Test results, usually of the project next stages for important information source as service does If the tests during detected strict mistake or shortcomings exists if so, them elimination verb for exactly measures is seen.

Second important stage – population for use according to training courses organization is to reach Modernization of infrastructure in the process of using need was new technologies and systems about the population informed to do important importance profession The population for training courses, to users from violations save from the system effective use and their from the potential complete use possible solve problems quickly to do help gives Usually, training courses modern methods, interactive trainings and practical exercises with is enriched, this and of participants knowledge and skills to increase service does.

Third stage – project efficiency evaluation. Modernization of infrastructure efficiency evaluation, inspection results and population for take visited training courses efficiency based on to do is increased. Project efficiency assessment process, modernized from the infrastructure use efficiency definition, project for the purposes suitable arrival about exactly the information to take for It is important. This in the process, statistical analysis, questionnaires and from users taken feedback based on project efficiency and his/her to the population effect about exactly solutions offer will be allowed.

Synov exploitation stage, in infrastructure modernization important to the point owner is a project the results determination, population for use opportunities expansion and project efficiency assessment through, of the economy stable development to provide service does At this stage being taken results, infrastructure modernization of the process next stages for main initiative source as It remains. innovation, modern technologies and education to society current to do through infrastructure modernization efficiency further increase possible.

6. Project to do increase for offer done regions

The project to do increase for offer done regions

Our project for offer done regions between Urgench of the city population, economy and social infrastructure very much with attention worthy was places located Urganch of the city reputable neighborhoods, including the “Al- Khorezmiy ” neighborhood, the “ Turtkul ” MFY and new building 5-7 storey house blocks our project for the most convenient pilot area as selected.



"Al- Khorazmi" neighborhood, Urganch of the city central in part located is, the number of inhabitants and socio-economic activity with known of the neighborhood location, infrastructure and social to services proximity him/her our project to do increase very suitable for area as seeing our exit provides. In the neighborhood of the population between take visited research that shows that they are social to services need is feeling. This and our project within the framework the population support, service to show and social activities transfer for successful opportunities to create basis will be.



" Turtkul " MFY, Urganch of the city again one important territory there are too many to the population service shows. This in the neighborhood community transports, markets and social infrastructure facilities are very good developed Our project to do increase for " Turtkul " MFY facilities and communication tools with close communication take to go opportunity, our project efficiency to increase service does.

New building 5-7 storey house blocks Urgench in the city modern construction to the standards suitable created These home arrays, own modern architecture and convenience with of the population to the requirements answer gives Our project within the framework exactly these home arrays through social services, health care, education and culture in the fields and new work places creation for the purpose of activity our management demand will do.

Our project within the framework Urgench of the city public, state and private sectors with organ cooperation take we go necessary. This cooperation local of the population needs complete to determine help gives and of our project efficiency increase for necessary was resources in distribution effective mechanisms creation possible gives. [3.5.17.]

From now on outside, Urgench in the city infrastructure objects, including roads, electricity energy, water supply and sewage systems our project to do increase for important to the point owner. This infrastructure objects our project because of development provides and the population modern services with to provide service does.

Our project to do increase in the process, as well as the population thoughts and suggestions to account It is very important to get. Surveys, discussions and public meetings through of the population thoughts listening to our project effective and social to the requirements answer giving in case to do increase possible gives. [4.10.]

Urgench "Al- Khorezmiy " neighborhood in the city, " Turtkul " MFY and new building 5-7 storey house blocks our project for the most suitable regions as The chosen one is undoubtedly this of the project efficiency to increase and of the population social his life to improve service does In these areas take to go works, new opportunities create, social infrastructure development and population for high qualitative services present to do purpose does of our project general the goal is Urganch of the city socio-economic development provision and of the population to live conditions from improving consists of

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