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(Construction Management)

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Research Project / Term Paper

Paper Title :: Design Build (Delivery Method)

“Delivery Method” by definition is the process and technique(s) of unifying the initialization of a project and, the ultimate start and condition(s) including the final situation(s), conditions and ending(s) of a project to meet up as one goal so that the project can utilize a useful, accommodate, successful and profitable ending(s) without incurring any vulnerable loss(s) during the takeover period(s) of the project(s) and the lifetime \ lifecycle period of the project(s) after turnover(s); likewise, a method of eliminating risk(s) in a project and contracts for the best scheduling and procurement purposes. It can also be defined as the systematic way(s) through which the owner(s) take(s) to approach to organize a \ the project(s) team(s) that will manage the entire design team and construction process\ processes with risk free attitudes and methods in a suitable comfortable predictive world(s). These stages of risk free world of delivery method can be divided into three stages known as \ namely: *Deign-Bid-Build*, *Design-Build* and *Construction Manager \ Management*. However, some of these methods have been chosen to the best alternate ways for some projects, constructions and other procurement attitudes and methods based on the way their services are helpful and easy to carry out without any involvement of stress and loss \ losses at all. A typical example of these methods is the *“Design-Build”* method which is mostly helpful in many ways to bring the \ all the deadline needs of a project into completion; likewise, it is very useful for many transportation projects and road projects including heath care facilities construction(s) and development(s). Nevertheless, it is the \ a type of delivery method that the owner(s) contract(s) with one single entity for the need of both the design and construction management service(s) including any construction(s) detail(s). Hence, some of its factors, clues and studies will be given out in specified styles and methods to

understand much about it and more about the ways it affects the situation and life cycle of construction(s), scheduling(s), procurement(s) and other delivery methods through various outputs many companies, organizations and contractors found it useful for their needs and projects successful outcome(s).

Looking at all the constituencies and other arms of *“Design – Build”*, it has been made known and worldwide as a tool \ system whereby many people such as the owner(s) and the contractor(s) will be benefiting from works and other contracts. By its actual definition made known, it is the delivery method that enables the owner(s) to use one way to simplify and subdue \ touch many sources and tools together at once without needing to go \ move to far on projects and on projects the owner has little or no information and datas’ about. It is a system \ method established further in 1993 to understand more about delivery methods in construction by the *“Design Build Institute of America”* and to be able to promote and maintain *“Single Source Project Delivery”* within the *“Design Teams”*, *“Architects”* and *“Builders \ Construction Association(s)”*. It is a system and a developed method to enhance more beauties in design communities and architectural communities even if many architects dislike it. This method came about to replace the old method of architectural and engineering delivery because of the impacts the old method issues \ used to give to the owner(s) before in the late and early century. Based on the reports given, design build has been on the rise again since **1986** prior to the old laws that forbade its practice in the early **1909**. Another report given by *Zweig White*, Information Service for **2005** Design – Build Survey of Design and Construction Firms, says that the larger percentage of their internal and external growths will come from the “Design – Build’ method because of its

achievement to their company. The report also states that many firms will employ the use of design build method as the major market system for them due to its involvement in industrial plant(s) business(s), refineries marketing(s), warehouse business including the construction of commercial businesses and organizations, parking garages, recreational center(s) and medical \ health facilities across the nation. It has now become a delivery method that is contradicting the use and other usages of the traditional ways of *“Design – Bid – Build”* because of its own styles of project delivery while the old traditional one takes two or more steps to get tasks done on time which also involves many internal conflicts that are not good for the owner(s) and the contractors including the design team(s) that is \ are involve in the planning, makeup(s), and constructing \ construction of the project(s). The old system makes the owner to interact with the design team(s) involve and other contractor(s) involved for the positive outcome(s) of the project and other subcontractors needed also while these are not for the new delivery method of the “Design Build”. Not only is it rising in the numbers of architects that are shifting toward it, more and more designers are been required to look into it and move into it and be participating as part(s) of the design build designers and architects and gradually moved up to be part(s) of the intermediate and senior architects also while architects are been required to be working together as teams so that contracts can be circulating around and within them. Excerpt: The Hopes and Fears of Design Build.

Due to many of its *“Complex Natures”* before, more factors and guidelines have been included in its practices which include contracting with the professional architects and attorneys to make design build a better option over other methods. Also, it has been chosen over the traditional method because it dissolves and releases all the fostered

conflicts the old method had \ has in its constituencies which makes it more superior and preferable for companies to adopt over the old method \ system. Furthermore, the quality(s) of styles and works produced by it are far better beyond the old system; likewise, the cost of production(s) for construction(s) needs using design build is \ are far better and procured than the old fashion of project(s) delivery. Nevertheless, the federal government has also adopted the use \ usage of it also for many of their projects because of its detailing performance specifications in meeting up with all the deadlines needs and construction details as given and sets out at the beginning of work \ project(s) prior before starting any construction which makes less spending for the government also. The only fear in it so far is that many architects believe that they may not be profitable using the ***“Design Build”*** because of its fast delivery and early commitment they always have that can't \ would not be change anymore after agreeing and signing the contract with the owner ; however, this has been proved wrong also only if the design team and \ or the architect(s) involved in the production has \ have good setups within companies and good internal workmanship which will \ can help to carry on further and extra project(s) without been bothered whether the cost may \ will be too small for them to survive as a practicing profession. Nevertheless, the report also states that a good workmanship, teamwork and friendly environment(s) with no conflict in any direction will entail long lasting practice of the profession only if the design team(s) and architects work together as one and with the construction bodies \ sectors and many more jobs \ contracts will continue to surface / rise for them as long as the bond within the internal bodies are strong. As a result of this \ these required shifting(s), both architects and designers \ drafters will be able to be working together as a team and contracts \ jobs will be

circulating within and around them without having a season of unemployment(s) knowing that the quality of work(s) is \ are the \ that relationship(s) between the contractor(s) and the designing team(s). An example of using the design build method was \ is stated by architect “Steve Coxhead”, the senior associate at *“David Owen Tryba Architects (DOTA)”*, when a \ the contract of the Municipal Building that belongs to the City of Denver was awarded for the big architectural contractors and small sub-contacting architects to work together and to understand each other’s philosophies about designs selection and other architectural duties that must be at effect for the construction which started in July of *2000* and took them two years and two months to complete and a month ahead of the scheduled date and month. In the current era, many architects making suggestions and further options to stand by “Design Build” method and to have some of their constructions folders filled \ loaded with design build contracts \ works because of many of its advantages including cost(s) and schedule(s) consciousness. Another report given by “William Hellmuth”, the President of *“HOK”* and AIA member”, design build method can also win and stay big anywhere there is submissions of contracts are judged on value(s), not just been the lowest bid contract \ design, documented design(s) for quality(s), judging of the buildings is based on the design quality that manages to stay and remains within a specific financial frameworks and budgets and the ability(s) to shift things to and fro within the framework(s) of the budget(s) within a short period of time responses. Excerpt: The Hopes and Fears of Design Build. Another observation given by another analyst says that more and more of it are getting into the works of the public and private sectors and about one third (37%) or more of the population are in the use of it currently including future considerations. As

stated also, it has become the main dominant in the “Municipal and Government Sectors” with a total population of 45% presently and its procurement purposes dominate the **“Transportation Sector(s)”** totaling 47% in number. About 57% of the survey made states that they need it for the reduce cost because of higher inflation after “Hurricanes Katrina” and 38% of the same population reports that they need it due to its better and structured delivery schedule while **“Construction Manager (CM)”** at risk(s) dominate(s) the educational sector totaling 25% in population with an option of reaching 38% if more jobs \ contracts continue to evolve in the **“Educational sector(s)”**. Excerpt: McGraw-Hill Construction Design Build.

After several observations and conclusions from different sources and organizations, it is known and stated that the “Design Build” method is greatly profitable for many construction works and projects because it enables the contractors and the owners to resolve arguments right and to deal with needs of the projects better. For example, an article produced by the “American Society Of Civil Engineers” ASCE describes how effectively it was good for some of their projects most especially in the **“Transportation Industries”** and the methodologies it give for successful outcomes of projects. It is also stated that it gives better results for faster delivery of works and other materials and resources required for most of their transportation(s) project(s). Excerpt: Design Build in Transportation From The Research Perspective By Douglas D Gransberg. Nevertheless, another report that is also given by ASCE also states how effective it is in procurement laws and for establishing wastewater utilities and facilities including the expansion of the existing facilities on time without too much spending and

delay schedule(s). It also reveals helps to deal with risk management, evaluation of proposals, determining the level and percentage completion of design(s), establishing trust(s) among the members of the team and the owner including the chances to quickly identify the key players and participants in the design team(s). Excerpt: Design Build for Water / Wastewater Facilities (Journal Of Management In Engineering) By Keith R. Molenaar. Furthermore, another report given by the “State Transportation Department” of Texas also reports all the successful outcomes of design build in most of their engineering projects. Part of the reports given is how it shortens the total of their schedule time during the delivery time they were engaged in constructions works over the traditional \ other delivery method known as “Design – Bid – Build” likewise in procurement cases and needs without giving a loss and delay of materials and other resources for constructions. Excerpt: Design Build Procurement Process Model For Delivering Highways In Texas by Giovanni C Migliaccio, G Edward Gibson, Jr. and James T. O’Connor.

Stepping further and ahead on “Design Build” delivery method, more facts were revealed and given out by another **“Health Corporation \ Organization”** that utilized it for evaluation of the healthcare needs. It enables them to know the overall costs of the project sooner than expected. Furthermore, It enables chances for **“Change Orders”** during the course and continuation(s) of the project and also yields no impact or negative impacts on the owner at all till the turnover of the project; however, the side effects will surely and certainly result on the contractor(s) that own \ owns the project(s). This means that the design team(s) and the contractor(s) will surely be responsible for any slight or great change during the change orders period(s) regardless of being professionals or not.

Likewise also, any form(s) of risk(s) during the construction belong(s) to the contractor and the construction(s) team(s) and not for the owner at all. As reported also, it enables all the design teams, the contractors and other parties group(s) to stay on one side which enables the owner to communicate easily without having any extra journey or request to make \ deliver anywhere else which is also rated best for healthcare practices and construction(s) because of its conducive atmosphere for healthcares. Additionally, it becomes the most recognized and utilized because it allows spaces and gives chances for a better approach to treat planning of projects, better approaches for design(s) selection(s), integrated tasks and efforts for all constructions works and communication(s) for better project(s) delivery and to create the best integrated team(s). These effects make it a better choice and option over the *“Pre-Construction Construction Manager”* because they add no penalty or additional fee(s) for the owner to bother about as the preconstruction construction manager method does; also, it brings no delay of turnover(s) to the owner since most \ all the tasks are carried out by the design team(s) and the construction(s) team(s) and any other contractor(s) involved in the project(s) as the preconstruction construction manager does because the owner has big influences on the project(s) delay(s) due to big influences the owner has on the design(s) of the project(s) and any forms of delay for the construction(s) also. It is now widely stated and in the report that any drawback(s) the owner may have in the design and construction stages can be quickly resolved by bringing in the third party which is known as the “Construction Manager” to help and quicken the status of the project(s) forward and to act and serves as the intermediary \ middle man \ broker for the owner and to distribute any unexplained and delayed information to the owner and the building

contractor(s). This slight involvement and approval of the ***“Third Party”*** has made “Design Build” even more superior and well accepted over the previous system of design bid build because the owner(s) can stay far away from the design team(s) and contractor(s) and still has \ have chances of making any reliable change(s) and ***“Change Orders”*** to the preapproved design(s) and other templates without spending too much for \ on the third party agent(s). Also as reported, it is a method that has the bigger ability to ***“Fast Track”*** all the construction phases of a \ any project and early cost(s) and schedule(s) commitments are at stake with no other \ any possibility of changing them anytime the construction works and construction(s) designs are in progress. Finally, it is a method that has no conflict in it or within it and any evolved conflict will and must be resolved by all the participants without involving the owner(s) at all in any of them because the owner has authorized the initial signature on the design(s) and construction(s) selected as he \ she has been involved in the early commitment(s) that will not change \ alter his early requests anymore. Excerpt: KLMK Group (Providing Comprehensive Facility Solutions).

Concluding on all the responses and details of ***“Design Build”*** method, it is clearly stated that it is a delivery process \ technique whereby tasks \ projects can easily get taken care of without stressing on any trouble and the fastest method of resolving conflicts between the owner(s) and the design body(s) \ team(s) including any involved sub-contractor(s), contractor(s) and constructor(s) also. Also, design build method has been confirmed and proofed to be a risk free method for the owner(s) regardless of any agreement and attestation between the design team(s), the contractor(s) and the owner at the initial start of the contract and design likewise before any designing begins \ began.

Furthermore, another report given by the *“American Society of Civil Engineers”* and *“Transportation Companies \ Industries”* also states that it is the best method ever for any \ most transportations and road works projects because it gives better scheduling for materials and resources delivery for their projects without giving any delay for their project and to be wise in budget also without having a loss or debt(s). Hence, design build has also taken the steps forward and also on the rise after its domination in **1986** as reported and also gaining more grounds among the acceptable architects, builders and other constructors \ contractors that see no evil in its styles and sequences of projects delivery after it was first forbade due to the fear that many architects and designers had in it previously in the early years. Where it has been utilized with the construction manager is in *“Educational Sector”* whereby the owner can have more power and accessibilities on the design and construction so that he \ she can profit from such project(s) at the end of the construction(s) and the ability of not taking much from the owner. This opportunity makes it more reliable than others such as *“Design Bid Build”* which takes too much demands and dependencies from the owner(s) of a \ any project(s). The current rise in educational demand for construction manager and design build reported 25% in statistic and currently giving another rise to 38% by the analyst. Its advantages have been reported also in the evaluation and construction of water and waste water projects and they yield effective procurement laws for both renewal of t he existing facilities and construction of the new ones; also, they include risk management(s), trusts establishing among and between partners \ bodies, evaluation of proposals and proper management and determination of the completion level(s) of projects as scheduled before and after the beginning of the designs and construction(s). Another report given on the “Multifamily”

projects states that it has given and still reporting better values and results in terms of cost evaluation, scheduling performances, cost versus quality and quantity versus quality performances including all forms of specifications since year 2000 when they the evaluation started. *Considerations* in the *“Heath Sectors, Health Corporations and Health Organizations”* also yield similar factors and effects like others that have practiced it over the years with similar reports and observations including the involvement of the third party \ parties using delivery method(s). Other consideration of it for selection in the health sector(s) includes the ability for non scheduled and predicted *“Change Order(s)”* that can come up at any instance during the construction and design(s) phase because of the ability of been able to negotiate situations and matters with the *“Construction Manager”*. In addition, the tendency of not having risk(s) or any slight risk in it also make(s) it more acceptable and demanding for them while the opportunity of been able to interact with another source for construction manager during the working phase also allows the growth of *“Free Integrated Business Interactive \ Interaction Atmosphere”* between the two bodies which makes life tasks and business comfortable for the owner(s) or the main contractor(s) that own(s) the project(s). This acceptance of the free environment for the “Third Party” member to be involved known as the “Construction Manager” has also given big opportunity for the owner(s) \ owned contractor(s) to improve fast track of deliveries, scheduling, commitment of the early budget(s) and any alteration that may come into existence later on when the project(s) is \ are still on working schedule \ tracks. Also, any \ all drawbacks in the project can easily be handled and well taken care of by the employed “Construction Manager” to hasten the situation of things and to resolve any unsolvable strict task(s) for the owner(s) or the

owned contractor. Nevertheless, any form(s) of conflict(s) that may come into existence after the letter of approval \ intent has been given makes no impact on the owner(s) even if the contract(s) is owner is \ are another \ other construction(s) contractor(s) while other matters that may somehow harm the owner(s) can also be easily resolved on time by the *third party's project deliverer* employed incase the owner(s) are \ was \ were not satisfy by \ on the agreement made during \ after the issue of the letter of intent \ approval for go ahead of the project(s) \ contract(s).

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