Course on Landscape Architecture and Site Planning-Basic Fundamentals
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Lecture 27
Module 6
Behavioral Principle (Continued)

Good Morning, I hope you have enjoyed till whatever I have discussed as I promised now we are gradually entering into the Design Parameters whenever we are trying to design a landscape what happens is we have been given a site the site owned by our sponsor, we say a typical term called client client has a site which he wants to develop as a landscape project and you are the designer, you have been now approached by the client for designing this particular landscape try to understand this.

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Once he comes to you and then he expresses that what is the kind of design then immediately one question you have to ask him that what kind of landscape project are you (())(1:27), what kind of landscape project do I have to prepare for you, or what is in his mind, or what is at the back of his mind, or what is his what is the kind of thing (())(1:40), what he does not want. So basically what happens is whenever a project comes to you you try to understand the project, for understanding the project we call this as a design brief so design brief it is.

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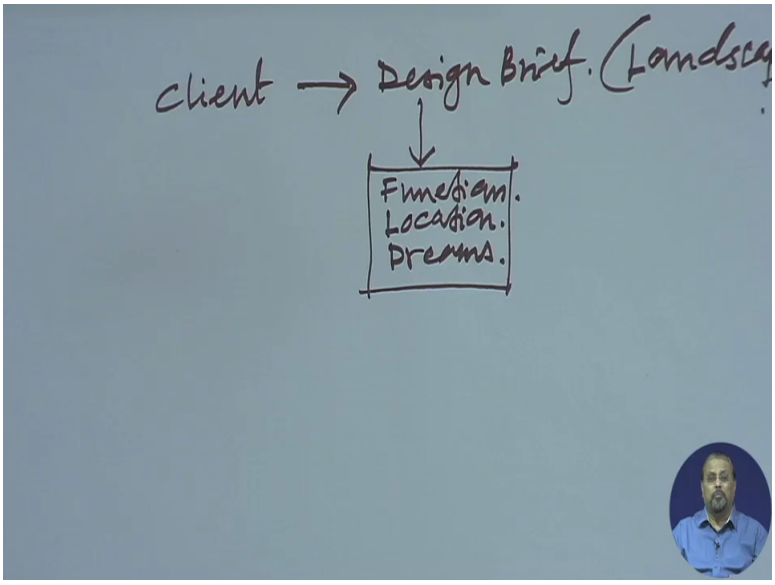

Now as soon as the design brief is given to you let me just give you a sequence the client comes to you with a design brief this design brief of a landscape project because our focus is on landscape, he comes with the idea ok the landscape project that you are going to do, the moment he says this he will ask for the design brief from him and this design brief will tell you what kind of functions to be located where that means the location and the clients dreams, what he is trying to get out of it.

Unless you understand these three things you will not be able to design, what is first the function, what function it was, location will be the next somebody comes and tells you I want to redesign a resort which is in a large area full with more of greens and the resort which people will come here to relax for few days and enjoy the landscape of it, that is a kind of thing he might have said. I can also assure one thing the client may be coming with a design brief sometime or sometime client may not be very much prepared or may not be (())(3:38) about it or very much knowledgeable about it.

What he wants, he may have a (())(3:43) idea and he will come to you and express that this is the kind of thing which I want this were enough for you as a professional fair enough. The moment somebody is opening his dreams to you then immediately you can from your own knowledge, background knowledge, your research you would be able to find out ok this is the kind of dream he has in a site that he is bringing in to me and then this may call for this kind of functions some of them he has named but many are the other function which can come in which he did not named you can suggest.

So this is how the whole process starts, so the dialog between the owner and the designer landscape designer at the initial stage makes a very big difference at that point owner may not be able to clarify all, at that point you as a landscape designer should assist him and try to give him clue that ok this is a kind of project you are in the searching the this should also have these these these these things.

Client may come up with some predetermined idea preconceived idea he may say I want this this this and you may find that in that particular location or that particular site it may not be very suitable then it is your responsibility to educate him, convince him saying what is the negativeness of that particular project. What happens is the client generally goes to some other landscape sites looks at it get impressed as a viewer as a user and then dreams of making a landscape site for his own and then he tries to tell or express to the landscape designer communicate to the landscape designer saying that these are the things I want.

Landscape designer might then at that time since he is train will try to find out that what are the things which are not good for this particular project, what are good for this project. So what happens is before this site investigation that particular step comes in and I did not really focus much on that for a very different reason, it is only a very short meeting within which you can come to know what are the functions you want.

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Then comes the location you have known once you have the location then your next very important responsibility prior to planning is this stage site investigation this is what I have listed here in the screen Site Investigation, Analysis and Appraisal.

Todays discussion will be focused on this what is the site investigation we are talking about client has come with the design brief which is a printed document, client may also come with some kind of pictorial representation through photographs or may be a video and now you are trying to understand it, view it. But you are going to design on something which is going to be transplanted over there. So at this particular stage this site investigation is very very essential. So this site investigation or rather I would say site analysis is very important.

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This analysis will have first the investigation part and then the analysis part and then the appraisal part. So it will call for investigation, what is that investigation investigation is basically nothing but trying to know about the sites.

What is analysis I am saying very simple. Investigation is trying to know about the site as much as possible, analyses is trying to analyze the potentials and constraints of the site whether it is visual, physical, functional, environmental all aspects. So you are trying to analyze this with respect to such parameters and appraisal is after analyses whatever you have inferred from there that is appraisal.

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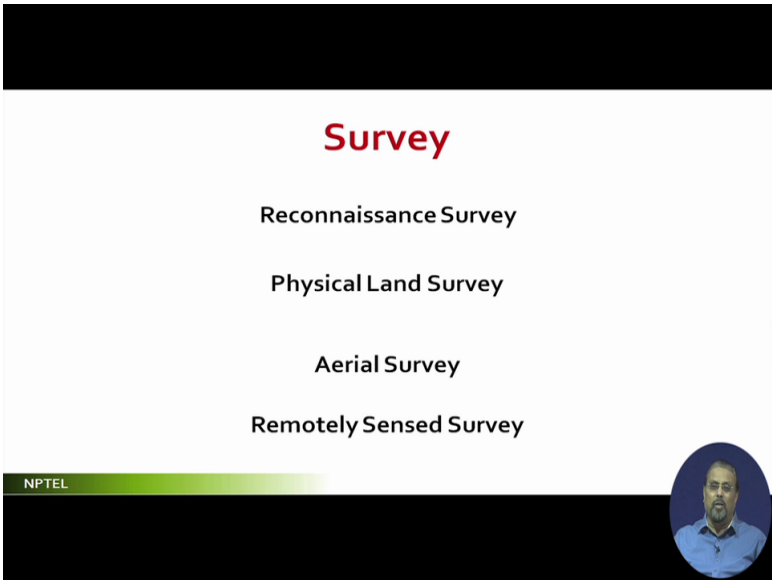

Now I will show you in terms of first step site investigation. Survey which basically makes a very strong component of the investigation in that if you see my list here the first one is Reconnaissance Survey, the second one is Physical Land Survey, third one is Aerial Survey and the fourth one is Remotely Sensed Survey.

Note that in your landscape plan you said you will get the opportunity to do all not necessary it all depends on the scale, it all depends on how much is the domain of your landscape site which we are trying to investigate on, how do you go for this. Reconnaissance is when you go yourself to the site you means you or your trusted representative who is going to bring that the visual pictorial representation to the best possible manners so that you can comprehensing over here.

Personally I can tell you what I do, I never rely on anybody else if I am the designer, I do not rely on anybody else is Reconnaissance Survey I will go myself to the site, I will look around the entire site as far as practicable. If it is too large to larger site it happens for landscape planning projects is large site but for normal standard landscape projects you can walk from one corner to another rather you can move for the entire entire structure of that particular landscape project site. When you see this you do a Reconnaissance Survey a very common term used for this is called reiki you might have heard many of your friends, professionals they are saying I did a reiki of the site basically what his meaning is that he has done the Reconnaissance Survey of the site.

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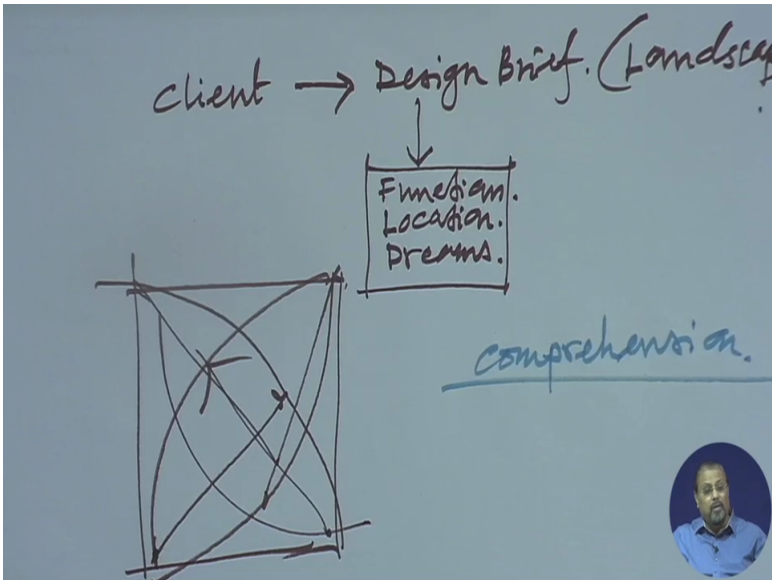

In the Reconnaissance Survey what you do is say this is a site, you try to see view the entire site from this particular viewpoint once look towards this, from here try to see this part, from here try to see this part, from here you try to see this part. So basically you are trying to see the entire site from different corners may be. Not that every time that the corner will be every easily accessible.

So may point is it is not the corner of the edge, it is the vantage points from where you can get the best comprehension of this. So here another term that comes in is basically the comprehension. So Reconnaissance is for your comprehension of that site, there are many ways of doing it different designers use different methodologies for comprehension. Somebody looks at it takes quick photographs, somebody takes individual shots, somebody takes the serial shots going walking from one particular point towards another, somebody takes a video shoot of the entire, somebody takes the panoramic view of the entire.

Somebody there are different ways of doing it, somebody focuses on something very interesting in that particular site. So the Reconnaissance basically means that as much as pictorial reserve or say documentation that we can do, that is what is a Reconnaissance Survey, it helps a lot I will tell you it helps so much that many of your design ideas crop up at that particular stage itself, ok.

So when you take this into consideration, gone into the site if possible if you have any site or if you do not have a site but you just hypothetically try to see this exercise you can go to any nearby park thinking that the park is redesigned by you and you do the Reconnaissance then

you will realize what I am saying. You walk in for whichever point you may be standing at the center trying to look around you may be standing at one corner trying to look at the panoramic view, if the site is undulated try to see the tilted view, if the site is undulated downward try to see tilted down.

So point is you are trying to document the entire visual points, why it is important when you are seeing it I will tell you I can assure you at the first shot itself many of the ideas will immediately crop up at the back of your mind immediately, this is split second reaction you may maintain it, sustain it or you may change it but some ideas will come there I am sure for landscape project specially, for architecture site I may not comment that way well sometimes it happens that many of my designs when I went for Reconnaissance Survey many of my designs cropped up there itself in my mind and I found that I am quite through to that particular reactions and I did not could not deviate much because that the first idea that comes in your mind is pure raw and it evolves from the sites.

So for landscape it is although more true when you look at it, then immediately many of the ideas crop up, what you do is at this particular stage a true (())(13:17) reconnaissance you take notes of all those. If the idea is coming in your mind take note of that idea which is coming record it do not leave it at the back at trusted memory because when after sometime when you will sit down to plan you might have forgotten that or you may not have that first reaction recording and whenever you are trying to relook into it you might find that no no no I thought at that point of time but now it is not because you are still not in the same sensory modes at that particular point.

So what you do is in the Reconnaissance you move around the entire site take note of all positives and negatives, potentials and constraints and limitations, strengths, weaknesses. You know what we say as what analyses strength weakness opportunity and thread similar but there you try to always try to find out what are the threads in landscape project say the threads are minimal. So I will not use that slot for here but the thing is similar kind of mindset works at this particular point, ok.

Once you have done Reconnaissance of this particular site then you assign surveyors to do the survey of this site and that is the Physical Land Survey, what the Physical Land Survey will do basically what you want.

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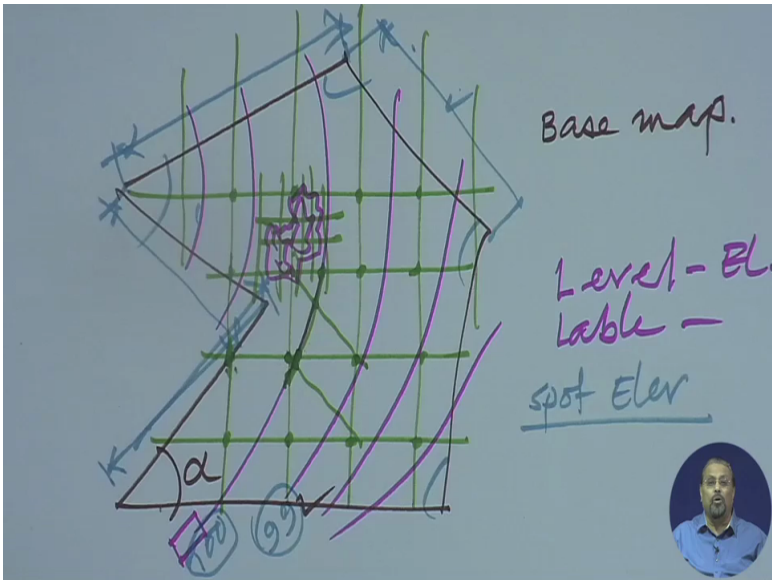

The project that you have say this is your site you need to get exactly the dimensions of each of this edge and the angle, this you need to get, this length and this angle and this is called in the Physical Land Survey that traverse which will create a base map.

Now here your role is very important what you have to do is you have to give a very clear idea to the surveyor that what all he must not miss in documenting, just like as you have said this point, this point this is a traverse dimension, this dimension, this length, this length, internal angle, external angle everything which will make absolutely a true representation in diagrams whenever you are trying to reproduce this.

So the base map that you are preparing you are suggesting your surveyor that exactly what all information he has to have as it is you have all these information, that is why you will find that this kind of base map will have say if you ever must have seen a dimensional drawing of the base map in this you will find this is one dimension, this is another dimension all these are the dimensions that will be recorded here, ok and the angle.

Along with this there are many other features which are contained within has to be recorded, what kind of features first of all the topographic features, if suppose this particular area has it is not flat it is contoured in such case the topography factors that you need to have, you need to have something called contours need to have this. When you have the contours these contours are not the physical line inside these contours are notional elevations uniform elevations along this particular line, these are not the notional lines seeing on the site.

How the surveyor will do it he will find out the spot elevations of different oceans, it may be uniformly made with grids and the interceptions points at that you will try to find out the elevations what elevations and then from there interpolate or interpolate or extrapolate these contours and once he gives you the contour line also has to give you (())(17:11) level this level there are two things one is the level, this level is going to represent what is the elevation of it and there is another thing which is label this label is nothing but annotation of it.

That means if it is said that suppose somebody is saying this is 100, then 100 is the elevation and this is say 99 considering that this particular drop is 1 meter, this 100 is the level, 99 is the level, 100 is the level both are labels. So these sometimes nowadays we are using the term called annotations, ok by annotations this is depicted, why it is important just I have just covered these 2 labels if now you look at the contour drawing you will not be able to tell me which site is up which site is higher, which site is lower this is very very critical.

If suppose I just change from this 100 to here and 99 here the whole site goes in this direction this row and if I say this is true then the whole site goes in this direction this is very critical. So whenever you are asking the surveyor to do the survey he is going to find out the spot labels. So spot elevations when he is trying to find out the spot elevations here is one more thing will come in, spot elevation at what interval.

So all the Physical Land Survey which started with the chain survey and all that there are many more developments and different kind of equipments have come or rather different device evolved over time which are giving us more comfort and more accurate information. We have chain survey, we have play interval survey, we have prismatic survey, we have theodolite survey. Nowadays we are using total station.

The point is these are different survey equipments at each point of time with the limitations of that machines or equipments whatever level of precision that was achieved was being done ok. So if suppose the chain survey chain survey can also give the right dimensions but nowadays total station survey we say that total station survey gives you it gives you more comfort in doing the survey and nowadays the total station survey is also being you know controlled with GPS Global Positioning system.

So point is that equipments are of different quality and which got evolved over time the idea is not how good the equipment is idea is what you are trying to get, what is the utility of that information that has to be transmitted to me whether collected to chain survey or collected to

play interval survey or theodolite or TS total station it is immaterial to me to me the information that I need with precision or accuracy is important, ok.

So what might happen I will just give another example with respect to this. Let us say see originally what used to happen is the server used to draw an uniform grid equidistant uniform grid, if any old drawing that you would see you will find this equidistant uniform grid and at these intersection points they would take the spot elevations and record it wherever see at the edges if it is if the intersection point goes beyond the site at the edge and then ok all elevations spot elevations that is recorded over here.

And with respect to this between you know the finding out the level if this is one elevation and this is another elevation, let us say here with respect to this drawing this is higher and this is lower in such cases if they are trying to find out one Particular elevation one Particular elevation which will be treated as a contour line let us say 100, that 100 if I take this pink line is the true representation of the contour elevations with respect to the data that we have achieved from this particular grid line then this point must be lying at more than 100 level.

This point is below 100 level, this point is below 99, this point is above 99 below 100. So what happens is from these particular points I am trying to find out trigonometrically the related distance and the elevations with respect to that, they will try to find out if this is 100 something plus something then where the point of 100, then with respect to these two pairs if this is 100 plus and this is 100 minus then where is really 100.

And with respect to this pair, this is 100 plus and this is 100 minus then where is 100, so these 3 points which will be corresponding to the 100 now will be connected. So that represents within this square that segment which is the 100 label. Similarly go from here to this I am just showing one more with a bigger with respect to this this is the location of 100, this is the position of 100 and this is the position of 100 and if you connect this then you get the this as a line called 100.

So this is how the entire contour lines are extrapolated or interpolated based on the pair of dimensions on all these sides. So basically there are three pairs you do not have to do any other intermediates. So if you do between this pair, this pair the first edge pair, perpendicular pair and the diagonal pair you get three points and three point makes a wonderful curve, ok.

If you want more precision ofcourse you can find out the intermediate level over here also and then from here to here this is a pair and they find out the 100 but if this particular square

is pretty large in the filed then naturally to get this curve it will become slightly different. If the distance is smaller than very quickly you can attend this curve however this is how the whole of this survey is done.

So I was discussing about the concept and the fundamentals on this particular how this survey data has to be used by us. What will happen then is that if suppose we find for (())(23:42) if suppose the whole land is flat do you really and there in reality there will be one contour line and the next contour line may be at this particular end, will you be dividing into so many such grades and take the pain of doing the spot levels (())(23:59) all these things are not necessary.

There you can tell the surveyor that you can use the distance between these two by so many meters. How will you do it, you can only do it when you have gone to the site felted, you have seen it you have a photo documentation and at the site itself you have a feeling visual visually interpreting and perceiving and then through comprehension see interaction you can say if this site is so flat I did not take intermediate levels.

So my distance between one particular spot elevation point and the next elevation point may be quite far away because in between if I do take any other points it will make marginal elevations in the elevations. But if suppose you find that within this there are some bit of irregularities in the topography, then if you take an elevation over here as one the next elevation over here than in between whatever elevation changes which you have slightly slightly occasional at some cluster at one particular point will not be recorded in your diagram.

So what happens in such case what you do is you tell the surveyor that you take this particular take this much of grid but only at that particular point you make further divisions. So that this particular elevation is recorded I hope this is clear the way the whole survey has to be done, the survey has to be guided by you the designer and do not leave it to the intelligence or experience of the surveyor because the surveyor will be very true to his work, he will be very diligent in surveying, he will be very expert in using that machines and ultimately interpreting with this.

But what is very important over here is what data should he bring for you, you have to guide him. This is the particular stage where you would see that the whole survey procedure becomes almost an integral part of your planning and that planning you know how it happens

an example let me tell you why I said that at the Reconnaissance level itself many of your planning decision you will take atleast I do and if you are trying if you are doing for the first time try it you will find that yes it will be done in the similar manner, basically what happens is look at this the same sketch which I am showing here.

Suppose I had been to the site and I have found that no intermediate contour levels are not there, it is the first level here and the next level here agreed. So this is flat but certainly I found that there is something like this and they make be a rock outcrop and I would take note of it, not only I will take note of it, I will also record it in my drawing. So I will ask him that ok, this is one grid, it is a next grid by which I can always use it but give me the detail of this in terms of its height, topography, contours and everything.

So here I and then may be at the site before the survey has been done I can also decide oh this particular element which is rock outcrop I will use it in my landscape, I will not destroy it, I will not flat in it just because the entire site is flat I will use this for very specific reasons. So I must have the full dimension of this in terms of contours, its changes, the profile everything, so that whenever I am working nothing can be absolutely non dimensional because here once that particular drawing comes on to your table you will find that everything is very very dimensionally done.

And you cannot release on drawing from your design table for construction without dimension. You will see later I will show you some that whenever you release one landscape drawing apparently to impress your client you make a very colorful presentations, the client tries to conceive or perceive what you are going to create because that is not yet created. Now the contractor who is going to execute it he is not bother about what colorful presentations you have shown to the client and got approval, he tries to know exactly the location of each and every item and their specifications and their quantities.

So dear friends this landscape design is not a pattern making game I am repeating, landscape design is not a pattern making game, not a colorful exercise, landscape is one of the very strong technical document which is represented for approval with colors and textures and fancies. But when it comes to the brasstacks of ground reality of implementing on site everything has to be so dimensional, ok in the next I will discuss about the other aspects of it, thank you.