# संरचनाओं के भूकम्परोधी डिजाइन के मानदंड

भाग 1 सामान्य प्रावधान और भवन

(छठा पुनरीक्षण)

## Criteria for Earthquake Resistant Design of Structures

Part 1 General Provisions and Buildings

(Sixth Revision)

CS 91.120.25

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# SPONSORED RESEARCH & INDUSTRIAL CONSULTANCY OFFICE TRESTAN INSTANTE OF TECHNOLOGY ROOMER

Tel-01832-235818, 01312-48556

# STANDARD TERMS AND COMPETIONS OF CONTRACT FOR CONSULTANCY PROTECTS

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The Institute theories in Principal to restigated by the Principal Investigated Co.Pt. with plan the Anglest in the solicitor with the coloniations, economic and reclamber or statishing and other forms of position interest to the clients. The conditions are Chart. Those atims and describions povering projects for the developaries of products, processes, field shading trooks studied binding-valoss afboyv? a signed upon in a separate signed domitisou.

- DECLARATION: All work underlaken by the Principal Investigator Principal invatigator Co-Phat HERochies. give an undertaking that the project tuding consideration has not been executed by any other Pitofany other department in IIT. part of the project with the in good faith and based on mutchalkingother relevant information given by the offerst septiable for the work. The Cheut will provide the delais of project three cuted ingoing by different Lis of My Roockee and will Rocakee.
- oondinens allow, but accepts no sconguitable sy onsibility whatspayed, should the work hot fead to expeded results (II). Roomes which is beyond its reasonable control (Fersic Majoure). The Hability of UT Roorkee shall be limited to the fluids required for RESPONSIBILITY / LIAMILITY: The factions through PIVO-PI undertakes to carry but the project as ponducationaly as shall not be held Bablo f**or** any loss, d**etra**ge, defay **or** failure of performance, resulting directly on publicity from any cause,
- PISCIECTION: The histings through PECO-Plandentsker to handle with discretion reports, evolus, the literally of the Affair and all material specifically the social control which the effect places at the disposal of the PECo-PT in some office with the project of W. Rootlers, subject to Reside to information rules are published.
- **ath**erw**ise,** to be carried out by a liked **geat**han our **ins**titue norms and procedures, provided by does not result in the danger, SUB-CONTRACTING: The instinue reserves the right to allow approved, in connection with the profest, expedimental or Pairingstion, of a confidential nature expeing into the bands of norethodized persons.
- pert of the effect are available free of charge for the Client's own use. Rowever, the PFCo-PVInstitute sessives not alght to Pulperitue, Unless otherwise agreed, of reports are to be sent to the Chent. The PICO-PI histiants has the right neutralina RESULT OF THE PROJECTED The result of all weak done at the total by the PI/Co4ff in comparison the project, incorporated in whiten reports shall runiain the property of the Chear, Results arrived at with little or nothingly ended on the use such regults in committees with activities recitite the scope of the project. If the Ollent consists of several individuals, all enestices of Clical, rights between the **Clicat**s must be settled between such individuals, and are **afte**s concert to the PPEc-

INTERLATIONAL PROPERTY RIGHT OF CONTRACTOR OF IN ACCOUNT A CONTRACTOR OF CHAIR AND CONTRACTOR AND SAID CONTRACTOR OF SAID CONTR transferring desting setting these nights to this Client shall his governed by a separate writing agreement is agained.

toms of published material which siffer to complete the proprieting regults of the project shall be velled by both perificial refere advergisensenthoty material or in any offigh manner Manuscrips of neademic papers, brothers, advertison officed TUSTIBEING THE RESULES VOUTS VINE OF 18 OF 18 OF TANCE IN FEBRUAR TO A SECTION OF SECTION OF SECTION OF THE PARTY OF THE PROPERTY OF THE PARTY OF TH not be emploited by the Chem organization for its business interests by using III' Roonkeels notifiling through praise publication

- COMMUNICATION OF RESULTS TO A FIRM PARTY, the PICO-PI cony met, without his written derivated of the Offent, communicate the teagles of the projective attending our Tag Client shall arrange the necessary withten agreement of each parcies on the Olien's side who may have publication diffus with tespectite the project.
- PROJECTS.FOR OTHER CLIENTS : The Enclude mogenize where projects in the curic field provided in the first of an knowledge and belief, there exists no flanger of information of a syntidential parture coming throused and a first party ai
  - APPARATEUS: Instruments and or equipment obtained in conference mits the project and charged to the client temal the property of 107 Rec<mark>ides,</mark> and assentherwise is is interpolitically agreed in the Institute. ġ
- The decision of M. Roorkee shall be fixed in Agras reasonable assettes proses is concerned. The Instinct is a play the right en (examinate the project straing time except season cherwise agreed spon. The Chieft in this case note and to the for any The content of the content of the content has a time to termine articopolegic any time, but shall be lighte for all reconnic exponent incurred in contraction with exiting wint abready in press actualing to the agreed working grants. expenses increased after the commutation. <u>بس</u>
- PAYMENTS The Express of computation charges to its Repaires sports be made in advance and in full buffire in that software project, through the bank teamster. The charges will also that have supplicable by as prespiced by the Coursepapies inclusistate Georgiament(s)/funy.cideg. statutoey/hady, feorg time in thus Ä
- amicably hymowaal consultation. Fixing respindion is not possible, then the unresolved dispute or difference shall derested a to a sole arbitrated to nontinated by the Discieral distints for a reasoned Award. The seat of Amortendan shall be, within the compus of EP Koorkee and the tanguings of arbitration, shall be English. The Award of the arbitrations that be dending DISPUTES: In the seeid of any dispute by difference between the parties hereby such dispute or difference shall be residived on the parties to the diagrafs. á
- the particular archodysecarch and jayoo way reflects. Assate), 65157 Rootice, 177 Repticular is nor responsible for the sociaral. DISCLAIMEND The report on the occurationer projective technical opinion of the PIVCo-PI based on his/distinguist to ar completeness of the report and the sole of the bis instituted to providing administrative support in Bishridish. Ħ
- GOODS AND SHAVICES THE POP CST ALL 2017, the Goods and Services Tax will be levisible total consultancy chat gas and this wind in to be borned by the Citeats (Lie applicable 0.51 imes imes 0.18% with 0.197.2017 ). 5

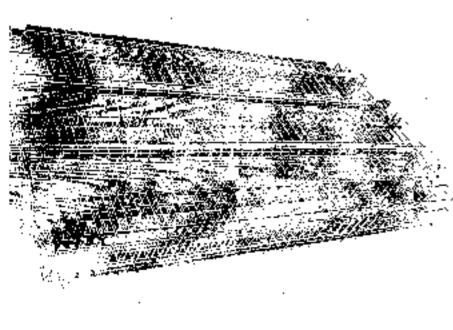
Name & Signature / Principal Investigator

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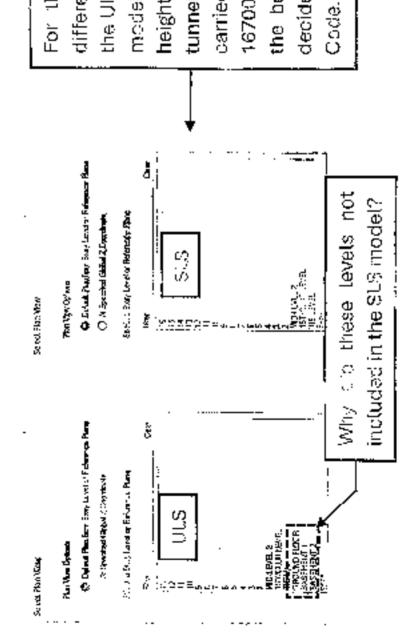
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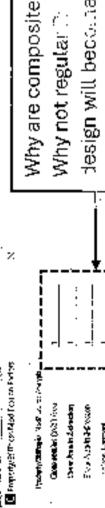
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Please check and confirm that the their dimum slenderness ratio of the building is in compliance with the requirement able-2 of the IS 16700:2023. If this compliance is not satisfied then the building shall be obtained as a Code-exceeding building and an external review committee consisting of experts will need to be constituted for granting final approval to the structural analysis and design of the building.



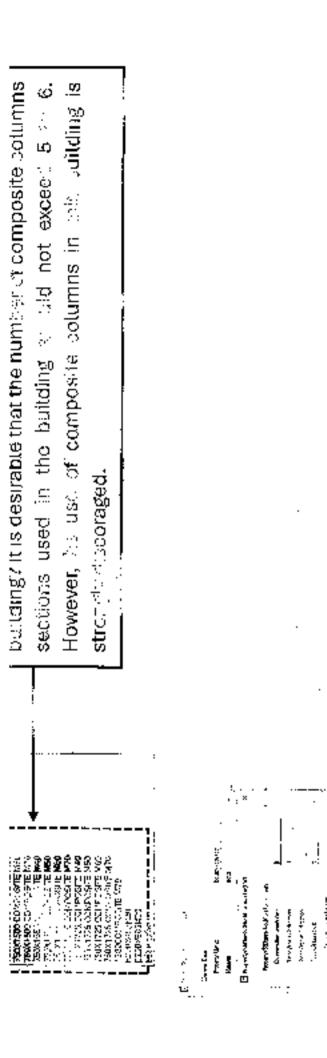
For the same building why is there a difference in the overall building rights in the ULS (164.65 m) and the SLS (179.65 m) model? It may be noted that if the building height > 150 m then site-specific wind tunnet testing of the building will have to be carried out as per Clause 6.7 of the IS 16700:2023. The final wind bods for which the building has to be sizelysed sight be decided as per Clause 6.2.2 of the 17.7% Code.



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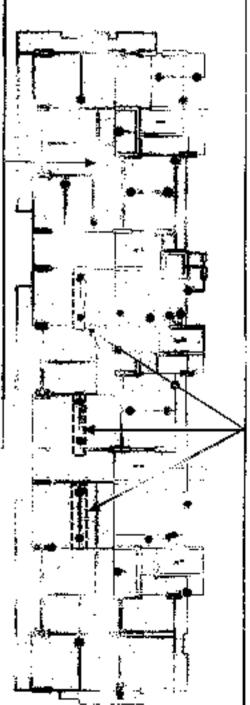
Why are composite columns propose in the traiteding? O / stoel columns: The presumm connection design will become critical in composite columns. With have no

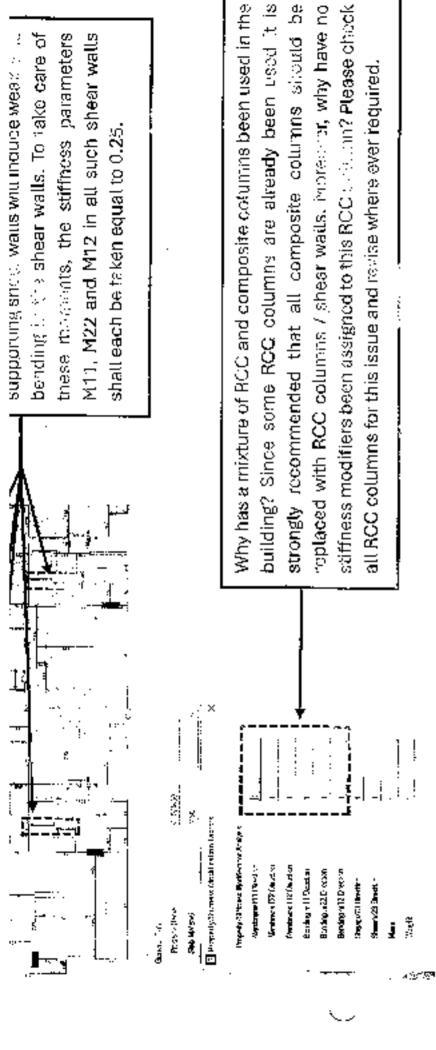
manufactions become stational form



in the framing costent? If these beams having large depths designed and detailed using the provisions for condensus Where are such 8.4% in beams (Depth = 9300 mm) provided fall in the category of a continuous deep beam as defined it is 456:2000 then these beams shall be antitions, Select this octor for all sections of beams, columns and shear whits used in the building framing system. deep bearns of this Code.

nexample? Please check all secondary beams Detailing shall be consistent. Why end moments have not been released The fire, string **system and adopt consistent end moment** to una**ses.** in this eccondary beam for



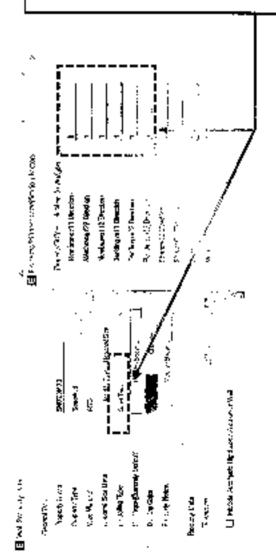


500 mm been provided in the building? Please note that any vertical element of the framing symem ಣ 39) ...i (column / shear wall) having a plan aspect ratio < 4 shall be classifin columns and designed and detailed accordingly. Where are shear walls with thickness >

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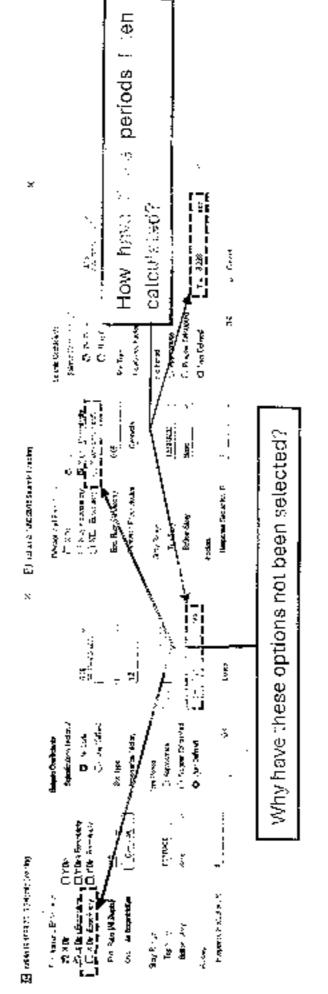
A typical shear wall will resist latural loads action. Keeping this mind, take f11 = 🐔 🗀 112 = 0.9 and m11= m22 =m12 =0.1. This shall be done for all RC shear walls in the framing system. In case any shear wall is mermbrane resisting significant out-of-plane bending, then for all such walls take mild = m22 in-plane primerity through m12 = 0.25 On what basis has the soil type been taken as "Type". "? What is the weighted and corrected 'N' value up to a depth of Combelow

Coupling Mano

200

design transfer

aquipment or solar paneus thall be taken as a non-reducible SJDL. These sould fectors are only valid for the UES analysis. In the SLS It may be noted that 2 parallel P-Delta SLS analysis shall be earned out: In one analysis the lateral load shall be WL and in the other EL. Worst of these 2 cases shall be analy: a scale factors shall be taken as follows: DL = 1 whereas for Solar panel load shall not be taken less than 0.2 kN/m2. the Li and the WL / EL the scale factor may be taken = 0.8. analysig was lateral load = encidered for design. 8 🙀 Janes Leherel Vans et State Gewalk 20年の日本の C. Bekenner-Consistent O Bekenner-Consistent Bekenner-Consistent C. J. A. Variend R. J. Securitaria de la constituidad d : ¯ ,\$. ACCEPT LANGE Company (process) - 150,031 Pass Colors

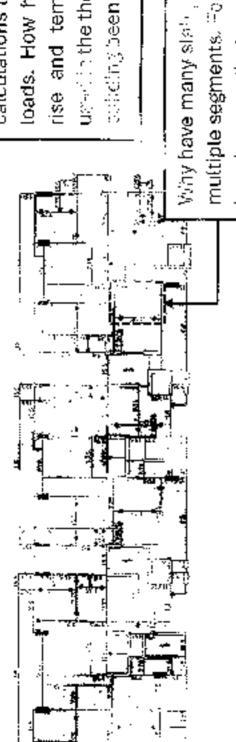


For 'Wind Y' gust factor loads, the along-wind loads, FY, seem to be larger than the case of tail wind load, FX. Normally, in the case of tail buildings, the across-wind loads are larger then the atong the across-wind loads are larger than wind loading calculations again and confirm that the calculated wind loads are correct. Long-hand Wind X and Velocity gushfactor loads shall be submitted to review together with all supporting data.

time-dependent properties of interest are creep and shrinkage behaviour of concrete.

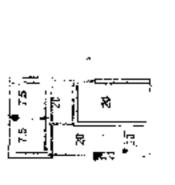
These four completions are COMPLETELY UNACCEPTABLE, Why are ುinations included in the SLS ಗಾಂತ್ರೇ? Please add AL ULS load

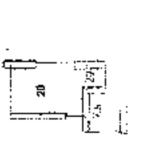
code recommended SLS toad combinations.

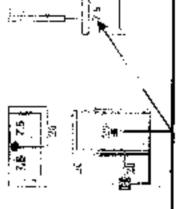


Supporting calculations for the assumed wall loads. How has the temperature rise and temperature fr ಿ be ugadin the thermal analysis of the strikting been calor (ated? share Please

als been split into multiple segments. For example, this panel Please check all other similar cases also, Segi...rxs. က split into peen



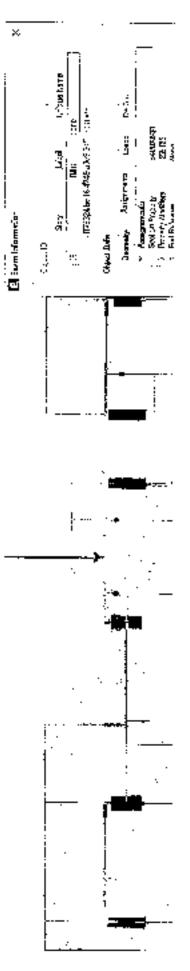






What is the source of these heavy (we loads acting at this elevation? Weight of all full terrace supported water table chall be token as a non-reducible SIDL

Framing plan at <u>Z =146.15 m</u>



Framing plan at Z = 135.45 m

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There is significant coupling of a calciational and torsional response in the Mores 2 and 3. This is indicative of a significant mismatch between tocation of center of mass and ce. (№ of stiffness in the of the shear walks to 0.7. By doing this the shear walls will be over-designed and they shall then be able proposed building. One solution to this problem is to lower the utilization ratio in the structural design to resist the additional loads due to the coupling effect. Problem may be mitigated to some extent by Sional re-arranging / adding additional shear walls to the framing system in order to increase than stiffness and hence fred to the freming system.

Biory Stiffness

obsorvations together with a copy of the revised ETABS ಗಾಣಿತ್ರ of the building for a fresh review. The structural engineer is requested to submit a point-by-point response to each of the above

Also to be submitted is a point-by-point compliance of the building with each of the requiremental of the Tables-5 IS 16700; 2023.

Review of sub-structure design shall be taken up only after all issues related to modelling and analysis of the super-structure have been satisfactorily resolved.

Colleges (Action Colleges Coll

July 23, 2024.

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HOD.

Department of Civil Engg, HBTU Kanpur Nawabganj Kanpur (UP) Sub: Vetting of Design Drgs of D wall

Respected Sir/ Madam Ji,

We the PALOMA REALTY LLP is constructing a high rise 34 Storey multi storied residential tower Basement we are constructing the diaphragm wall of 600mm /800 mm thick, the Design and drg at 7/98-99 Tilak Nagar Kanpur, with 3 basements of each height 4.7 meter (floor to floor). In for this diaphragm wall has been done from Geocon International Pvt.ltd. Mumbai.

We want the vetting of these designs and drg from your institute, for which kindly share your techno commercial terms and conditions, and what data you require from our side.

hanking You

Gopal verma

G. M. (Project)

B. Tech. (Civil engg)

HBT! Kanpur

### Form GST REG-06

[See Rule 10(1)]

## Registration Certificate

# Registration Number: 05AAAL10033R1Z5

<u></u>	T.egal Vame	INDIAN ENSTIT	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	LOGY ROORKE	H.
ci	Trade Name, if any	INDIAN INSTI	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	LOGY ROORKE	3E
જાં	Constitution of Business	Local Authority			
4.	Address of Principal Place of Business	SRIC, 0, MAIN Uttarakhand, 24	SRIC, 0, MAIN BUILDING, IIT ROORKEE, IIT ROORKEE, Llaridwar, Uttarakhand, 247667	ORKEE, IIT RO	ORKEE, Haridwar,
vi	Date of Liability	01/07/2017			
ğ	Date of Validity	From	7102/2010	To	Not Applicable
t	Type of Registration	Regular			
æ	Particulars of Approving Authority		} 		
Signature	<b>4</b>				
Name					
Designation	ıation	     			
Jurisd	Jurisdictional Office		J		
9. Date		F3/11/2020			
Note: J	Note: The registration certificate is required to be prominently displayed at all places of Business/Office(s) in the State.	be prominently di	splayed at all places of	Business/Office(s)	in the State.

# Details of Additional Place of Business(s)

GSTIN 05AAAL10033R1Z5

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE Legal Name

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE Trade Name, if any

Total Number of Additional Places of Business(s) in the State

٥

Commission of the Commission o 177700

Legal Name

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE.

Trade Name, if any

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

## Details of CEO or Equivalent



Designation/Status Name

ASSITANT REGISTRAR

JITENDRA DIMBL

Resident of State

Uffarakband

Ehepsinder Singh, Heim, F: SPSSO7

:01332-285885(O) : 01332-275070 Completed - March Dataphice (Completed)

CED/RS/Consl./2024

Sh. Gopal Verma

G.M. (Projects)

Patoma Resity, Tilak Nagar, Kanpur

April 12, 2024

Ref. Your entail of April 11, 2024

Sub: Proof-checking of structural design of the proposed building of Paloma Realty in Kanpur

💛 Donasa is hereby given for presidenceking of sepateral design of the above-incetion definig(s) subjected to te 1 上版校の方に 不 にあるこ 1,000 640 1 Sollowing 197225 and conditions:

design calculations and complete Good-For-Construction (G.F.C.) drawings of the propiesed builting(s) shall be submitted for seview. The D.B.R. should a sury explain the strategy adopted for modeling, preliming sizing and the circumstances having a bearing on the building design shall also be mentioned. Frany software as been used for the 1. Offee copy each of site geo-technical avestigation report, Design Basis Report (D.B.R.), layout drawings, analysis and assignment of loads and their combination in the analysis and design of the proposed building(s). Any special カラーのだっといういかればな 機解から analysismed design then the pomptors input file of the polymers shall also be submitted for property

Residuce. The DD may be mailed to the undersigned for further processing. The fee payment may also be made online 2. The total fee inclusive of 18% G.S.P. for the LOD Recorded services shall be Rs. 12,39,000/4. If agreeable, then the quoted fee is mayable in full in advance for way of a crossed DO drawn in favour of LLT. Roorkee and payable as at the following details under intimation to the undersigned: Name of Bank: Punjab National Bank; Branch Address: E.L.Y. Campus, Recorked: Account Name: Industrial Consultancy - PNB; Account No.: 40440003100031597; Branch Code: 4044; IFS Code: PUNB0404400; MICR Code;247/24103, Please gnote your G.S.T. and T.A.N. number white recuitting the consultancy fee to L.I.T. Root kee under intimation to the undersigned.

3. A nominal time of 5 to 6 weeks shall be required for the completion of the proof-checking exercise and submission FLT. Roorkee observations, This time shall be exchaned from the date of receipt of all the information mentioned above and the fer to full.

web site number 192,168,122,241. Please note that only typical G.F.C. drawings of the difference or actural abundars of the proposed building shall be reviewed though modelling, analysis and design shall be the protocusively analysis and design shall be the protocusively analysis and design shall be the protocusively and also proposed by the protocusive of the protocus of 4. Province**rking of structural design shall be carr**ied ove as par 3.4.T. Roorkee consultancy rules given on the Institute is excommended that building analysis, modelling and design should be period out an UTABS and SAFE 2015.

Should you have any startifications to seek then please feet free to get in wuch with me.

Than ing you,

Yours sincerely

OEPANTWANT OF OINAL ENGINEERING TAREAT - 247 667, FITTERNEY, HACK NOUR FRAMENCY OFFICEACHAND IN DIE FRAMENCY ON S2-170566, 27036C Tolored ON S32-170566, 27036C Tolored ON S32-170566, 27036C hww.hmether/Clibbs/CONSLISSER

June 03, 2024

MS Paiona Res IV (LP

Take Nagar

Kanpur

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7. Rootkee P.A.N. Prober: AAAL 10033R

LIT. Roce. 72 C.S.T. number: 05AAA1.70033&125

III. Roczker Services Account Code: 998395

Pull payment is to be made in advance.

(Shupinder Singh)

2. Bhirmha Cor Saoth



## PONSOTED RESEARCH & INDUSTRIAL CONSULPTING YOUR NUMAN EASTERN OF TRCHNOLOGY ROORKEE . 0. 10011 285818. 01932-285561

Linkii. consultaney@sjic.iff aciu, arabb<u>icitrac.in</u>

# STANDARD TERMS AND CONDITIONS OF CONTRACT FOR CONSULTANCY PROJECTS

1 year of Paloma Really at 1 1 15 24. S. Gopal Verma, 6 ... ( Sugecla), Palowa Reuly, Tele lite of the Consultancy Job/Project: Name & Address of the Client:

Same and Department/Contro of the Princian Deventance (Fig.

Buy ween Sugh, Care by reving

The Institute through the Principal Investigment of Principal Investigation (Court) will play the Project in consultation of the orlandans, occasions and reductor emericing and other forms of project of specific interest to the edge of the conditions and Client. These terms and equilibrius stoken, a type a for the dovelopment of profinets, processes, field studies, noted binding culess otherwise especial mental aspende signed document.

- DECLARATION: All wisk industriation by the Principal Investigator (PECo-Directed Investigator) in the first control and the project will be in good faith and based on material/Capripther relevant information given the individual control of the individual project with the individual control of the indivi for the work. The Client well provide **the debils of project** simply excented/ongoing by different 21s on 1.11 Does held will give an underfaking that the project **under ponsiderat**ion has not been executed by any other F1 of any uther department in HT
- conditions allow, but accepts no conputite responsibility what second the work not lead to expected results. If Romekee Which is beyond as reasonable control (Fotov Majeure). The liability of 11T Romkee shall be limited to the funds received the RESPONSBILITY / LIABILITY ( The Institute unengl: PECo-FI endertakes to carry our dusproject as conscientionaly as shall not be field liable for any foss, damage, delay or fallure of parlennence, resulting directly or (edirectly from any cause, σi
- DISCRETION: The Indian's Tanget PECO-P undertakes to handle with describe reports, results, the identity of the office of eq. and all national specifically tweated/marked confidential which the object places at the disposal of the PVCo-Pf in premisely with the project at IIT Reardno, subject to Right to information rulesfregulations. m),
- SUB-CONFRACTING: The Institute reserves the right to allow any work in connection with the project manner of eithernist, to be carried out by a third party as per institute norms and procedures, provided this does see except that the degree of information of a confidential pattice coming into the hands of marthorized persons. ÷
- incorporated in written reports shall remain the property of the Client. Results arrived at write 6, 16 to take consert on the part of the client are available fies of change for the Client's own use. However, the POCA-FUllstrate reserves no right to RESULT OF THE PROJECT: The result of all work done as the Instrante by the PECA P. For a consider with the project use such results in connection with an arrives curside the soupe of the project. One area is accessed individuals, all Ministrate, University of solvening agreed, all appears are to be send to the Client The PMOs PBlusting has the right to retain a questions of Client, childs between the Libeats must be satisfed between such more drain, and are of the canoon, to the PVCs. 'n

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- PUBLISHING THE RESULTS/OFFICE OF THE CUNSIFIED TE FINITANCE: The results/outcome of the comsulation stads adventskubentpoblicity material geråt any aldet menner, ikkningerijala of nederrie gapers, krachures, adventsemmer se alber form or published material which refer to or quote the proprietary results of the project shall be votted by brait parities before act be exploited by the Clear organization for its business differents by using IFT Rockwells namedage through press κ,
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- APPARATES: Instrument apoling equipment obtained in connection with the project and charged to the printer to proposty of Hill Doorkee, using otherwise it is specifically agreed to by the hastjana. ≝
- TERMINATION OF THE PEOTE The Client has a ruch, to terminate the project or any time, but shell by flabin the su io termiosk the projectiat day thus except where orbersise agreed upon. The Cheptia like case will not be likele for a y The decision of UT Roctice smell be final as for as restrontioners of copenses as encounced the lasticity has that their reason. It evictores factored in conception with heling work aboutly in progress according to the agreed work programme. Puperses lacution after the technique ä
- PASIMENT: The perment of consolfation changes to DT Roccion and to be made its advance and in full before the vary of the project, through the Sank Banache, The charges will also include may applicable tax as presented by the Conservating of hodis/Stute Government(g)/mg/ officer samplery body. From time to time. ģ
- DISPUTASE to the event of our dispute or difference between the portice hereto, and, dispute or differences shall be resolved to a sole arbitrator to be continued by the Pheeton of the Institute for a reasonal Award. The seat of Arbitration shall be erbicably by mutusi consultation. If such resultation is not possible, then the unresolved dispute or difference sixil be refigued within the campus of MC Rocubse and the fanguage of orbitraring shall be English. The Award of the arbitrary stuff be binding on the parties to the dispura. ď
- BISOLA MERC The report on the conscionney project is the technical opinion of the PPCo-PH based on dis/drew expertise in the particular area of cassarch and in no way coffects the view(s) of UT Knockee, HT Remixtee is not expansible for the sournery or completences of the report and the voils of the fracture is 1, after providing administrative support to the project Ŀ
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Dt. Shuninder Singh

Name & Signature of Chane

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PALOMA REALTY spalonasaltylip@gmail.com> bhupinder singh kosütrörmeillerink to he, kushagna aorishekhmod Door Sh, Boysell  $\mathbb{P}_{\mathcal{C}}$ 24 11 20 11 24 TH Sny soul か 決 数 **\$** 440 as Ši () 2 5 Sabels

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ASSESSMENT NOT

25 Apr 2024, 10:07

Please share with the life following information:

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1. OST number of the party that will pay the full execution of fee is advance to LLT. Roorkoo, This is required for generating the prowill be sent to you for oxymorth.

2. The structural designor shall share with the Bre tokowing documents;

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To: bsiitr@gmail.com

Cc: Kushagra Jain <jainkushagra33@gmail.com>, abhishek.rmpd@hotmail.com

Dear Sfr,

structural digs from IIT Roorkee, So You are hereby requested to Kindly share the list of documents which Tilak Nagar Kanpur. Our Structural Consultant is M/s NNC design International, we want the Vetting of all This is with Reference to vetting of Structural Orgs , As we M/s PALOMA REALTY LLP is going to construct a High-Rise tower of 34 Storey with 3 Basement in you require, and what will be your charges.

Sir Kindly share all the details, So That action may start.

Thanks, and regards GOPAL VERMA G.M. (Project) 5 April 2024 at 17;02

bhupinder singh <bsiitr@gmail.com>

fo: PALOMA REALTY <palomarealtyllp@gmail.com>

Cc: Kushagra Jain <jainkushagra33@gmail.com>, abhishek.rmpd@hotmail.com

Dear Sh. Gopalji

Please send me the complete floor area of the proposed building following which I shall submit my detailed technocommercial offer for proof-checking

Regards

Bhupinder Singh

[Queled text hidden]

Bhupinder Singh, Ph.D.

Professor

Department of Civil Engineering

Indian Institute of Technology Roorkee

Roorkee 247 667, India.

Tel: + 51 1332 285885 (Office)

+ \$1 (532 285886 (Home)

Cell:+S1 8/75031000 FAX: +91 1332 285885

Alternate ⇒ mait: bhuoifce@itnernet.in

**PALOMA REALTY** <palomarealtyllp@gmail.com>

11 April 2024 at 17:58

To: bhupinder singh <br/>bsiitr@gmail.com>

Co: Kushagra Jain <jainkushagra33@gmail.com>, abhishek.rmpd@hotmail.com

Dear Sir,

Reference Your trailing mail

Plifind the attached details of Floor wise areal, it is around 6.0 Lacs. Sft. Pl. Share your techno Commercial Offer.

**Bhupinder Singh** [Quoted text hidden]

#### ITR Offer.pdf 705K

PALOMA REALTY <palomarealtyllp@gmail.com>

18 April 2024 at 11:04

To: bhupinder singh <bsiitr@gmail.com>

Cc: Kushagra Jain <jainkushagra33@gmail.com>, abhishek.rmpd@hotmail.com

Respected sir,

Thanks for your early response . We want to request you to kindly consider the quote amount to 7.5 lakhs +18% GST

It would be highly appreciated if you consider the same

thanks & regards

[Quoted toxt hidden] Gopal Verma

18 April 2024 at 12:07

**bhupìnder sìngh** <bsiitr@gmail.com> To: PALOMA REALTY <palomarealtyllp@gmail.com>

Cc: Kushagra Jain <jainkushagra33@gmail.com>, abhishek.mpd@hotmail.com

Dear Sir,

In my offer letter dated April 12, 2024, I had calculated the proof-checking fee at the rate of Rs. 1.75 per square feet. This is the normal fee that we charge for peer review of any tall building. Since, you have made a request in the trailing mail for reconsideration of this fee, the best I can do is to reduce the charges from Rs. 1.75 per square feet to Rs. 1.50 per square feet. This is the least amount that I.I.T. Roorkee should charge in order to do justice to the efforts involved in the proof-checking exercise.

Hence, the revised LLT. Roorkee fee inclusive of GST =  $6.00,000 \times 1.50 \times 1.18 = Rs. 10,62,000.1$ 

I am afraid that no further reduction of the fee will be possible because otherwise I will get into trouble with the Institute authorities.

Regards

Bhupinder Singh

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TO THE COMPLETE THE PROPERTY OF THE SECOND O

Cc: Kushagra Jaín ≺jainkushagra33@gmail.com>, abhishek.rmpd@hotmail.com

Dear Sh. Gopalj

Please share with me the following information:

- GST number of the party that will pay the full consultancy fee in advance to I.I.T. Roorkee. This is required for generating the proforma invoice that will be sent to you for payment.
- The structural designer shall share with me the following documents:
- (a) Complete Design Basis Report of the proposed building
- (b) Soil investigation report of the building site
- (c) SLS and ULS ETABS models of the proposed building
- (d) Long-hand calculations for the along-wind and the across-wind gust factor loads for wind along X and along Y plan directions
- adopted for structural design shall be decided after a comparison of the gust-factor loads and the loads obtained from (e) If total height of the building is more than 150 m or if the fundamental period of the proposed building is more than 5 s then site-specific wind tunnel studies shall be carried out for the proposed building. The final wind loads to be the site-specific wind tunnel studies.
- (f) Please note that proof-checking of structural design of Tuned Mass Dampers (if required) is not included within the scope of the LLT. Roorkee proof-checking exercise. We discourage the use of such dampers because of many reasons one of which is the absence of a well defined Indian Code for such dampers.

Regards

Bhupinder Singh [Quoted text hidden] ~ PALOMA REALTY <palomarealtylip@gmail.com>

.o. bhupinder singh <br/>bsiltr@gmail.com>

Cc: Kushagra Jain <jainkushagra33@gmail.com>, abhishek.rmpd@hotmail.com

Respected Sir,

Pl. find The Company GST No.

Thanks & Regards Gopal verma [Quoted taxt.:ild:ten]



Paloma GST No.. Jpeg

25 April 2024 at 16:08

रूड्का – 247 667, उत्तराखण्ड, भारत ROORKEE-247 667, UTTARAKHAND, INDIA

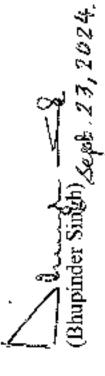
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# To whomsoever it may concern

This is to certify that the structural design and drawings of the proposed development named as Paloma The Grandeur, of M/S Paloma Realty LLP, 7/98-99, Tilak Nagar, Opposite Emerald Garden, Gate No. 1, Kanpur Delhi 110025. The structural designer has confirmed compliance with the required revisions and provisions of 1):2016, IS 13920:2016, IS 16700:2023 and SP:34 and where ever required, revisions to the structural analysis, design and drawings have been recommended to the structural designer of the building, M/S N.N.C. Design International, G-70, 2nd Floor, Jaswant Plaza, Near Kalindi Kunj, Main Sarita Vihar Road, Okhla, New 208002, have been checked with respect to requirements of the Indian Standards, IS 456:2000, IS 1893 (Part the aforesaid codes following which the structural design and drawings stand approved. This certificate is based on review of the submitted structural modeling, analysis and design of the structure under reference and it does not absolve the structural design engineer of his responsibility regarding correctness, adequacy, accuracy and safety of the design and drawings of the structure and nor does it relieve him from any of his contractual obligations.

other legal requirements or of safety aspects during construction or of overall quality of construction of the The scope of this certificate is limited only to the structural design of the above-mentioned building and LLT. Roorkee assumes no responsibility for compliance with local, state or national building bye-laws or with any said building

Any deviation from the approved layout, design and intended occupancy of the proposed building invalidates this certificate.



It my offer letter dated April 12, 2024. That calcifoled literarcof-checking fae at the rate of Ra. 1.75 per aquare feet. Postly the regi दोशायुक्त for peer review of any tall build. रेषु.

Since, you have made a request in the trailing mail for reconsideration of this faat the best loan do is to reduce the charges from Risquare fact to Rs. 1.50 per square fact. This is the Asat amount that LLT, Roorkes whole charges in pater to do justice to the efforts oloof-clearking exptdse,

Hence, the revised LLT. Roorkee fee inclusive of QST  $\sim 6.00 (000 \times 1.50 \times 1.18 = R_\odot, 19,82,099)$ .

l am afraid that no further reduction of the fee will be possible because off-erwise I will get into topole with the Institute autivarilies.

Regards

Ehaplinder Sing?

Thank you for your offer.

faccept the proposal.

Accepted.

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CLF/BS/Const/2024

Sh. Capal Verna

G.M. (Projects)

Paloma Realty, Tilak Nagar, Kanpur

♣pril 13, 2024

Ref: Your enail of April 11, 2024

Sub: Proof-checking of structural design of the proposed building of Paloma Regity in Kappur.

Loneant is hereby given for proof-checking of structural design of the above-frichridge (1) (ing(1) sabirated to the follo ring tems and conditions;

- subtritied for review. The D.B.R. should clearly expisin the strategy adopted for modeling, brelliminary string and the design extendiations and in meter Good-Por-Connection (G.F.C.) drawings of the proposed building(s) shall be assignment of loads and their constitution in the analysis and dought of the proposed building(s). Any special procunstances having a bearing on the building design shall also be we alwared. If any software has been used for the One copy each of site geo-declinical investigation report, Design Basis Report (D.B.R.), layout drawings, analysic such analysis and design then the complete input file of the software shall also be submitted for review.
- 2. The total fee inclusive of 18% G.S.T. for the 1.1.T. Roorkee services shall be Rs. 12,39,000/- H aggreeable, then the queted fee is payable in full in advance by way of a crossed DD drawn in favour of LLT, Royel wand payable at Roorkee, The DD may be mailed to the underlighted for further processing. The fee payment chay also be upone unline at the following details under intimation to the undersigned: Name of Bank: Punjah National Bank: Branc., Address: LUT. Campus, Roorkeet Account Name: Industrial Consultancy - PMR; Account No.: 4044000H00031597; Branch Code: 4044; IFS Code: PUNB0404400; MICR Code;247024103. <u>Please eyete your G.S.T. and F.A.</u>M. remitting the consultancy fee to I.I.T. Roorkee under intimation to the undersigned.
- 3. A nominal time of 5 to 6 weeks shall be required for the completion of the proof-checking exercise and submirroun of LLT. Foodkee observations. This time shall be no lead from the date of receipt of all the information maniformed shive anithe fee in fu∭.

web lite number 192.168.122.241. Please note that only typical G.F.C. havings of the different structural elements of Proof-checking of structural design shall be carried out as you filed, the structure constitution or service on the institute the proposed building soull be reviewed though modelfing, analysis and design shalf be comprehensively reviewed, to is recommended that publishing analysis, modelling and design should be carried out on ETABS and SAFE 2016.

Should you have any clariffuations to seek their piease feet free to get in touch with me

Taunking you,

Your sincerely

- Confidentiality: I'ms care will be taken by IIT Bombay to maintain confidentiality and discretion regarding confidential information received from the client, including but not limited to results, reports and identity of તાં
- Reports: Any test or other consultancy report given by HT Bombay will be based on work performed according to available standards and i or open domain literature, in any event, this report may not be construed as a legal document, certificate or endorsement and may not be used for marketing of the products or processes, without prior consent from HT Bombay. The institute reserves the right to retain one copy of the report and use the results of the project for its internal teaching and research purposes. mi
- time schedule. However, ITE Bourbay will not be held responsible for delays caused heyond its reasonable Work performance: Every effort will be made to complete the specified work according to the planned
- Conflict of interest: III Bombay may take up work for other clients also in the same area, provided, to the bost of the institute's knowledge, there is no conflict of interest in undertaking such projects. 'wh
- Payment: The payment of consultation charges to 1IT Bombay are to be made in advance and in full hefore the start of the project, through electronic transfer as per the bank details given in the annexure. The charges will also include any applicable tax as preseribed by the government of India from time to time. ø
- Termination: The project work may be terminated by either party by giving the other party a notice period of 30 days. However, both parties will meet any residual obligations in connection with the project. ₩
- which is beyond its reasonable control (force majoure). Provided, however that liability of IPT Bombay (if Liability: IIT Bombay shall not be held liable for any loss, damage, delay or failure of performance, resulting any) under all circumstances (if affixed by any Jaw or proceeding), shall be limited to the funds received for directly or indirectly from — (i) the project work undertaken hereunder or the results thereof, or (ii) any cause, œ
- in the due course of the project, will be the joint property of ATT Bombay and the client. Terms and conditions regarding transferring / assigning / selling these rights to the client shall be governed by a separate written Intellectual property rights: All rights pertaining to any intellectual property generated / created / invented and agreed to decouncert if required. á
- Resolution of disputes: any disputes arising out of the project shall be amicably settled by both the organizations. Any unsetfled disputes may be subject to resolution as per the Indian arbitration and congiliation act 1996.
- based on his/her expertise in the particular area of research and not the views of UT Bombay. The contents Disclaimer: The report on the consultancy project is the technical opinion of the individual faculty member, of this report are purely technical/scientific and non-logal in nature and based on the information/facts All warranties or representations of any kind pertaining to the report or its contents are hereby expressly disclosed by the client. The client shall be solely responsible for any intended use/utilisation of this report,

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JURISH MESTRY #<u>\*</u>

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that rear proceed with detailuing the tecessary approved from the IITB I hope the above will stitly our requirements, and please infimition on to taking up this job. Plaase send me the letter of request on your company or organisation letterhead, along with the billing scoress, GSTIN, and TAN formaking tre Performa Invoice. A tibolsimen, as even juned in the endoxed standard T&C, wit appear in the (>>of-chocking report(s) to be submitted by me in this project.

Poyso feel from to contact molif any bit ifficiation is required.

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> Shoots **\$**

Warm regards,

Thank you

Rashi Bindal

Labels

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Thanks for your information.

Thank you for your response.

Forward

Reply to all

Reply:

KLA Const. Technologies Pvt. Ltd. | 2, Ground Floor, Shambhu Dayal Bagh, Main Kalkaji Roadij Mew Delhi-110020 M: 999-000-9055 || T.F.: 911-26911114/15/15/17 || Visit us *ot <u>www.kloworld.com</u>* 

Thanks for your feedback. . . . . . . . . . . .

Doar Sir.

Saby)

Thank you for shafing the modes with us for your upcoming project.

We have done a posimingly offect of the same and due to constraint of the building geometry, our seismic forces ro using FRIGTION SEISMIC 3RAKES or DAMPERS will not be optimal economically. Hence we look forward to your future projects where we could get an option to provide solution to building being and and purformance imjerevection training KLA – Quaketek's Friction Sersinle Brakes.

Thank you

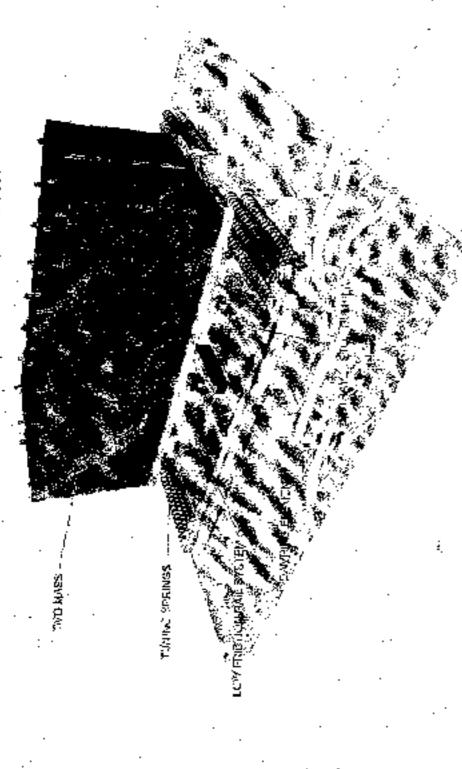
Warter regards,

Rashi Bindal

KLA Const. Technologies Pvt. Ltd. |} 2, Ground Floor, Shambhu Dayal Bagh, Main Kalkaji Rued|| New Delhi-110020 M: 898-000-8055 || T/F: 011-26011114/15/16/17 || Visit us at www.klaworld.com CONTRACTOR OF THE CIVILLY

### Turied Mass Damper

Total 1 no. of Tuned Mass Dampers of approx. 180-200 Tons Mass is recommended.



Rail Tyre THO -- key components

5,50,00,000/-(INR Five Crore Fifty Lakhs Only)

#### **Ferms and Conditions**

- Taxes GST (18%) and other applicable taxes shall be extra as applicable.
  - Payment 100% afong with PO.
- Freight Freight charges from GERB works, Bangalore shall be at actual. Price above is ex-works Bangalore.
  - Road worthy packaging shall be at 3%.
    - Lead time is 8-10 months.
- This price is based on the current steel price, any variation shall impact the final price.

We assure you our best attention and services.

Yours sincerely,

Projects and Sales Pratik Bagarla

GERB Vibration Control Systems Pvt. Ltd.