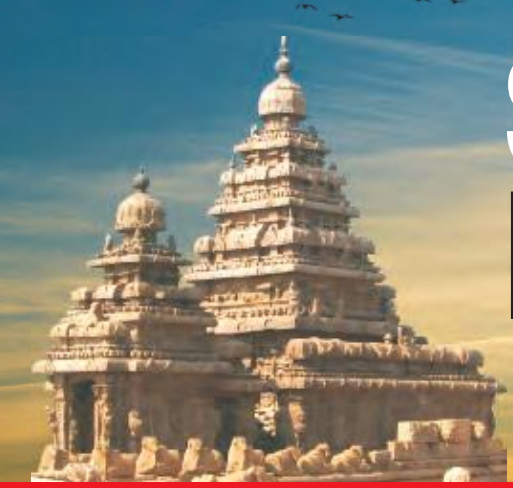

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ஆசிரியர் மடல்

வணக்கம்

வளர்ச்சிப்பாதையில் தமிழகம்

மாண்புமிகு தமிழக முதல்வர் அவர்கள் தலைமையில் செப்டம்பர் 9,10 தேதிகளில் தமிழக அரசு நடத்திய சர்வதேச முதலீட்டாளர்கள் மாநாடு, முதல்வர் ஜெ. ஜெயலலிதா அவர்களது சாதனைகளில் முதன்மையானது.

இரண்டு நாள் மாநாட்டின் மூலம் தமிழகத்திற்கு 2 இலட்சத்து 42 ஆயிரத்து 160 கோடி ரூபாய் முதலீடு கிடைத்திருக்கிறது. கடந்த 20 வருடங்களில் தமிழகத்தில் செய்யப்பட்ட முதலீடுகளை விஞ்சி இருக்கிறது. இதில் 1 இலட்சத்து 4 ஆயிரத்து 286 கோடி ரூபாய் உற்பத்தி துறைக்கும், 1 லட்சத்து 71 ஆயிரத்து 36 கோடி ரூபாய் எரிசக்தி துறைக்கும் , 10 ஆயிரத்து 950 கோடி ரூபாய் ஐ.டி. துறைக்கும், 1955 கோடி ரூபாய் ஜவுளி துறைக்கும், 800 கோடி ரூபாய் மேலாண்மை துறைகும், 500 கோடி ரூபாய் முதலீடு மீன் வளத்துறைக்கும் கிடைக்கும். சூரிய சக்தி மின் திட்டங்களில் 5345 மெகாவாட் மின் உற்பத்திக்காக 35 ஆயிரத்து 356 கோடி ரூபாய் முதலீடு பெறப்பட்டுள்ளது.

இந்த திட்டங்கள் தமிழகத்தின் பல பகுதிகளில் பரவலாக குறிப்பாக தென் மாவட்டங்களின் பகுதிகளில் அமைய இருக்கின்றன. இதனால் மாநிலம் முழுமைக்கும் தொழில் வளம் பெருகும். இத்திட்டங்களின் மூலம் மேலும் ஆயிரக்கணக்கான சிறு - குறு தொழில் நிறுவனங்கள் பெருகும். இதனால் சுமார் 10 லட்சம் பேருக்கு நேரடி வேலை வாய்ப்பும், 10 இலட்சம் பேருக்கு சிறு - குறு தொழில்கள் துணை தொழில்கள் மூலம் பயன்பெறுவர். தமிழகத்தின் அனைத்து பகுதிகளும் உட் கட்டமைப்புகள், சாலை வசதிகள் மேம்படும்.

புதிய முதலீடுகள் தொழில்கள் மூலம் தமிழக அரசுக்கு ஆண்டுக்கு வரி வருவாய் குறைந்தது. 25 ஆயிரம் கோடி பெருகும். தமிழக மக்களின் வாழ்வாதாரம் பெருகும். வாழ்க்கைத் தரம் உயரும். மாண்புமிகு முதல்வர் அவர்கள், அரசு அதிகாரிகள் இத்திட்டங்களை விரைந்து செயல்படுத்தி 30 நாட்களில் அனுமதி அளிக்க உத்தரவிட்டுள்ளார் மேலும் 2017ல் மீண்டும் சர்வதேச முதலீட்டாளர்கள் மாநாடு நடத்த உறுதியளித்துள்ளார்.

முதல்வரின் விஷன் 2023 திட்டம் இத்தகைய சீரிய முயற்சிகளின் மூலம் வெற்றியடையும்.

அனைத்து தமிழக அரசு அதிகாரிகள் முனைப்புடன், எந்தவித பிரதிபலனையும் எதிர்பாராமல், முதலீட்டாளர்களுக்கு எந்தவித இடையூறுமின்றி தொழில் தொடங்க விரைந்து அனுமதி அளித்து, செயல்பட வேண்டும் என்று கேட்டுக் கொள்கிறோம்.

இயற்றலும் ஈட்டலும் காத்தலும்
காத்த வகுத்தலும் வல்லது அரசு

- திருக்குறள்

அன்புடன்
மு. மோகன்

மய்யத் தலைவர் மடல்

அன்புள்ள உறுப்பினர்களுக்கு, வணக்கம்

மும்பையில் நடைபெற்ற மேலாண்மை மற்றும் பொதுக்குழு கூட்டத்தில் 34க்கும் மேற்பட்ட உறுப்பினர்கள் நமது மய்யத்திலிருந்து கலந்து கொண்டு சிறப்பித்தனர். இக்கூட்டத்தில் நமது மய்யத்திற்கு இரண்டு விருதுகள் அறிவிக்கப்பட்டது மிக பெருமையாக இருந்தது.

2014-15ம் ஆண்டின் அகில இந்திய அளவில் சிறந்த மய்யம் விருது அறிவிக்கப்பட்டதை பெருமையுடன் தெரிவித்துக் கொள்கிறேன். தொடர்ந்து 7 ஆண்டுகளாக நமது மய்யம் இந்த விருதை பெற்று வருகிறது. இந்த விருது கிடைப்பதற்காக உழைத்த நமது சங்கத்தின் உறுப்பினர்கள் அனைவருக்கும் எனது நன்றியையும் பாராட்டுக்களையும் தெரிவித்துக்கொள்கிறேன்.

மேலும் 2014-15ம் ஆண்டின் சிறந்த மாத இதழ் வெளியீடாக தென்னக மய்யத்தின் சதர்ன் பில்டர் மாத இதழுக்கு இந்த விருது அறிவிக்கப்பட்டது. இந்த விருதுக்கு உழைத்த இதழ் ஆசிரியர் திரு. MU. மோகன் அவர்களுக்கு எனது நன்றியையும் பாராட்டுக்களையும் தெரிவித்துக்கொள்கிறேன்.

தென்னக மய்யம் சார்பாக 29.09.2015 அன்று Service Tax பற்றிய கூட்டம் சென்னை ஓட்டல் சவேராவில் காலை 10 மணி முதல் பிற்பகல் 1 மணி வரை ஏற்பாடு செய்யப்பட்டது. முதன்மை விருந்தினராக கலந்து கொண்ட Commissioner, Service Tax திரு. G. ரவீந்திரநாத் உறுப்பினர்கள் கேட்ட சந்தேகங்களுக்கு மிகவும் பொறுமையுடன் விவரமாகவும் பதிலளித்தார். அது உறுப்பினர்களுக்கு மிகவும் பயன் உள்ளதாக இருந்தது. திருமதி. நளினா சோபியா, Asst. Commissioner அவர்கள் கட்டுமானத் தொழில் சம்பந்தப்பட்ட Servie Tax - விவரங்களை Power Point மூலமாக மிகவும் விளக்கமாக எடுத்துரைத்தார். அகில இந்திய முன்னாள் தலைவர் திரு. R. இராதாகிருட்டிணன் அவர்கள் கருத்து தெரிவிக்கும் பொழுது மிகச் சிறப்பாக எடுத்துரைத்தார்.

வருகின்ற அக்டோபர் 16,17 மற்றும் 18 தேதிகளில் House Hunt Expo 2015 கண்காட்சி நந்தம்பாக்கம் வர்த்தக வளாகத்தில் நடைபெறவுள்ளது. இதில் வீடு கட்டும் அனைத்து உறுப்பினர்களும் பங்கு கொண்டு பயன் அடையுமாறு கேட்டுக்கொள்கிறேன்.

அன்புடன்

O.K. செல்வராஜ்

மய்யத்தலைவர்

பவள விழா நினைவலைகள்

R. இராதாகிருட்டிணன்

சென்ற இதழில் நமது 8வது அகில இந்திய மாநாட்டின் சிறப்பு அம்சங்கள் பற்றியும் அதற்குப்பின் நமது சங்கத்தின் பரிமாண வளர்ச்சி குறித்தும் அறிந்து கொண்டோம். மாநாட்டின் எழுச்சியின் பலனாக நமது மய்யம் அகில இந்திய அளவில் ஒரு உன்னத நிலையை அடைந்தது. அதன் பலனாக நமது மய்யத்திலிருந்து பல அகில இந்திய தலைவர்கள் தேர்வு செய்யப்பட்டு மய்யத்திற்கும், நமது அகில இந்திய சங்கத்திற்கும் வலிமையும், பொலிவினையும் பெற்றுத் தந்தார்கள்.

1978-79,1979-80 இரண்டு ஆண்டுகள் தென்னக மய்யத்தைச் சார்ந்த திரு.M.N. ராசாராம் அவர்கள் அகில இந்திய துணைத்தலைவராக ஒரு மனதாக தேர்வு செய்யப்பட்டார். அந்தக் காலக்கட்டத்தில் அகில இந்திய அளவில் இரு துணைத்தலைவர்கள் மட்டுமே என்பதும், அவர்கள் அகில இந்தியாவில் இருந்து தேர்வு செய்யப்பட்டார்கள் என்ற நடைமுறையை நாம் அறிய வேண்டிய செய்தி ஆகும். திரு. ராசாராம் அவர்கள் அகில இந்திய உதவி தலைவராக இருந்த காலக்கட்டத்தில் அவருடைய தலைமையில் தென்னக மய்யத்திலிருந்து சற்றொப்ப 40 உறுப்பினர்கள் குடும்பத்தினருடன் மும்பாய் சென்று அகில இந்திய மகாசபை கூட்டத்தில் (All India Annual General body meeting) கலந்து கொண்ட நிகழ்ச்சி அனைவருடைய பாராட்டையும் பெற்றது.

8வத மாநாட்டினை தொடர்ந்து நமது சங்கத்தின் முன்னோடிகளாம் Sri. H.J. Shah, Sri. R.G. Gandhi, Sri. M.Nilantan, Sri. Nagabhushana Rao, Sri. Amarjitsingh Chowadry, போன்றவர்கள் கூடி நமது சங்கத்தை விரிவுபடுத்த வேண்டிய அவசியத்தை உணர்ந்து மேலும் புதிய மய்யங்கள் துவங்கவும், உறுப்பினர் எண்ணிக்கையை உயர்த்தவும் முடிவு மேற்கொள்ளப்பட்டது. மய்யங்கள் துவக்கவும், உறுப்பினர் எண்ணிக்கையை உயர்த்தவும் சாமான்னிய கட்டுனர்களை ஊக்குவித்த பெருமை திரு. ராசாராமைத்தான் சேரும் என்றால் அது மிகையாகாது. அதுகாரும் சென்னை, மும்பாய், டில்லி, ஐதராபாத், கல்கத்தா போன்ற மய்யங்கள்தான் செயல்பட்டுக் கொண்டிருந்த மய்யங்கள். திரு. ராசாராம் அவர்கள் முயற்சியால் அடியேனைப் போன்ற சாமான்னியர்களை ஊக்குவித்ததின் பயனாக நமது சங்கம் புதுப் பொலிவினையும், வலிமையையும் பெற்று வளர்ச்சிப் பாதையில் பயணத்தை துவக்கியது. என்னோடு இணைந்து பழனி முதலியார், கார்த்திகேயன், S.V. ராவ், MSK வாசுதேவராவ், சாரங்கராசன், போன்றவர்களின் அயராத உழைப்பின் பயனாக அகில இந்திய அளவில் தென்னக மய்யம் வலிமை வாய்ந்த மய்யமாகவும், இந்தியாவிலேயே உறுப்பினர் எண்ணிக்கையில் தென்னக மய்யம் முதன்மை மய்யமாகவும் 1988ல் சரித்திரம் படைத்தோம் என்பதை இங்கு பதிவு செய்ய விழைகிறேன். அன்றைய அகில இந்திய உறுப்பினர்களின் எண்ணிக்கை 6639 அன்றைய தென்னக மய்யத்தின் எண்ணிக்கை 1289 தென் இந்தியாவில் எங்களுடைய முயற்சியாலும் மேற்கத்திய இந்தியாவில் திரு. N.D. குலானி முயற்சியாலும் பல மய்யங்கள் துவக்கப்பட்டது.

1979ல் சிங்கப்பூரில் நடைபெற்ற IFAWPCA மாநாட்டில் அன்றைய அகில இந்திய தலைவர் திரு. H.I. Aurora அவர்கள் கலந்து கொள்ள இயலாததால் அன்றைய அகில இந்திய துணைத்தலைவர் நமது மய்யத்தைச் சார்ந்த திரு. M.N. ராசாசராம் அவர்கள் இந்தியாவின் சார்பாக தலைமை பிரதிநிதியாக கலந்து கொண்டார். இது நமது மய்யத்திற்கு கிடைத்த பெரிய பெருமை என்பதை இங்கு குறிப்பிட விரும்புகிறேன்.

அந்த மாநாட்டில் தென்னக மய்யத்திலிருந்து

இரு குழுக்களாக சற்றொப்ப 60 பிரதிநிதிகள் குடும்பத்தோடு கலந்து கொண்டார்கள். ஒரு குழு டாக்டர். நல்ல கிருட்டிணன் தலைமையில் ஜப்பான் வரை சென்று கீழ்திசை நாடுகளாம் ஜப்பான், ஆங்காங், தாய்லாந்து, மலேசியா, பிலிப்பைன்ஸ் போன்ற நாடுகளை கண்டு கடைசியாக சிங்கப்பூர் அடைந்து மாநாட்டில் பங்கேற்று தாயகம் திரும்பியது. டாக்டர் நல்ல கிருட்டிணன் தலைமையில் அடியேன், திரு. பழனி முதலியார், திரு.துக்காராம், திரு. கோட்டிரெட்டி உட்பட 38 உறுப்பினர்கள் பயணம் மேற்கொண்டோம். திரு நல்லகிருட்டிணன் பல வெளிநாடுகளுக்கு பயணம் செய்து தேர்ந்த அனுபவசாலி. அதன் பயனாக எங்கள் பயணம் பயனுள்ளதாகவும், அறிவாற்றலை பெறத்தக்க வகையிலும், சுற்றுலா தலங்களை கண்டு களிக்கின்ற வகையிலும் எல்லோருக்கும் மன நிறைவான பயணமாக அமைந்தது.

1980-81, 1981-82 ஆகிய இரண்டு ஆண்டுகள் நமது மய்யத்தைச்சார்ந்த திரு. M.N. ராசாராம் அவர்கள் அகில இந்திய தலைவராக தேர்வு செய்யபபட்டார். நமது மய்யத்திலிருந்து அகில இந்திய தலைவராக தேர்வு செய்யபபட்ட இரண்டாவது தலைவர் திரு.ராசாராம் அவர்கள். அவர் தலைவராக இருந்த காலக்கட்டத்தில் நியூசிலாந்து தேசத்தில், ஆக்குலாந்து நகரத்தில் நடைபெற்ற IFAWPCA மாநாட்டில் இந்தியாவின் சார்பாக தலைமை பிரதிநிதியாக கலந்து கொண்ட பெருமை பெற்றவர். அவருடன் நமது மய்யத்திலிருந்து திரு. துக்காராம் அவர்களும் மாநாட்டில் பங்கேற்றார்.

திரு.ராசாராம் அவர்கள் தலவராக பணியாற்றிய 1981 ஆம் ஆண்டு ஜனவரி 31 முதல் பில்ரவரி 2ந்தேதி வரை நமது சங்கத்தின் 9வது அகில இந்திய மாநாடு மும்பாய் நகரில் மிகச் சிறப்பாக நடைபெற்றது. மாநாட்டை அன்றைய மராட்டிய முதல் அமைச்சர் மாண்புமிகு Sri. RAMARAJO AOIK. அவர்கள் முதன்மை விருந்திரனராக கலந்து கொண்டு மாநாட்டினை துவக்கி வைத்து சிறப்புரை ஆற்றினார். மாநாட்டில் நமது சங்கத்தின் தலைவர் திரு. ராசாராம் அவர்கண் ஆற்றிய தலைமை உரை அனைவரது பாராட்டினைப் பெற்றது. அன்றைய கட்டுநர்களின் இன்னல்கள், இடர்பாடுகள், கட்நர் பணி போன்றவை அன்னாருடைய உரையின் முக்கிய அம்சங்களாக அமைந்தது. முதலமைச்சர் தனது மாநாட்டு உரையில் நமது தலைவரின் கோரிக்கைகளை ஏற்று ஆவன செய்வதாக உறுதி அளித்தார். மாநாடு எல்லா வகையிலும் சிறப்பாக அமைந்தது. மாநாட்டு தலைவராக திரு. R.G. காந்தி முன்னாள் தேசிய தலைவர் அவர்கள் சிறப்பாக பணியாற்றி அனைத்து உறுப்பினர்களின் பாராட்டைப் பெற்றார் என்பது இங்கு குறிப்பிடத்தக்கது. அவருடன் இணைந்து திருவாளர்கள் குலானி , நாராயண் வல்லேச்சா, R.M. சோக்ஷி, லக்கி மத்ரானி, விசாரே, போன்ற மும்பாய் மய்யத்தின் முன்னோடிகள் சிறப்பாக பணியாற்றினார்கள். குறிப்பாக திரு. காந்தி அவர்கள் மகளிர் குழுவிற்கு தலைமையேற்று ஆற்றிய பணி எல்லோரையும் மகிழ்வித்தது.

குறிப்பாக நமது மய்யத்திலிருநத சென்ற அனைத்து தாய்மார்களும் மெத்த மன நிறைவோடு மநாாட்டில் பங்கேற்ற களிப்பெய்தார்கள். மாநாடு மும்பாய் பட்டினத்தின் மிகப் பெரிய நட்சத்திர ஓட்டலாகிய ஒப்பராய் ஓட்டலில் நடைபெற்றது. மாநாட்டின் நிறைவு நாள் நிகழ்ச்சி ஓப்ராய் ஓட்டல் ரீகல் அரங்கில் மிகச் சிறப்பாக ஏற்பாடு செய்யப்பட்டது. அனைத்து உறுப்பினர்களின் களி ஆட்டமும், பாட்டும் இன்றளவும் என் நினைவலைகளில் பசுமையாக இருக்கிறது. மாநாட்டில் நமது மய்யத்திலிருந்து சற்றொப்ப 80 பிரதிநிதிகள் குடும்பத்தோடு பங்கேற்றார்கள். மாநாடு முடிந்த பிறகு நமது மய்ய உறுப்பினர்கள் அஜந்தா, எல்லோரா, சீரடி. நாசிக் போன்ற சுற்றுலா தலங்களை பார்த்து சென்னை திரும்பினார்கள். நமது மய்யத்து உறுப்பினர்களை அன்றைய தென்னக மய்ய செயலாளராகிய அடியேன் பொறுப்பேற்று செயல்பட்ட அரிய பணி இன்றளவும் என் நினைவில் பசுமையான நினைவாக அமையப்பெற்றுள்ளது. மாநாட்டிலும் , அதை ஒட்டிய சுற்றுலாப் பயணமும் அனைவருடைய பாராட்டை பெற்ற நிகழ்வாக அமைந்தது.

மேலும் நினைவலைகள் அடுத்த இதழில் தொடரும்.

GEOTECHNICAL REPORTS: Engineers Objectives & Contractor Questions

M.Karthikeyan
Past President BAI

The Geotechnical report provides critical and vital information for the owner, architect, design engineer, and the contractor to use and evaluate. The owner wishes to assess the cost of the project foundation and earthwork. The structural engineer is responsible for the design of an economical but sturdy building foundation. The architect may be forced to arrange building layouts to accommodate varying soil conditions. A foundation failure of a major structure is measured in cores of rupees and ruined careers. It can even lead to loss of life, such as the Moullvakkam failure. An ignorant or misinformed contractor can lose millions in unanticipated costs. Such mistakes often lead to major lawsuits that drag on for years and cost everyone except the lawyers. Being able to understand and analyze the Geotechnical report to avoid costly mistakes is in the best interest of all the project players.

Reports

Geotechnical (soils) reports are prepared to provide the design engineer and contractor with information regarding the soil conditions at a specific location. These reports are a wealth of information for the person that can properly interpret the information presented. Usually the soil report is primarily written to give the structural engineer the specific information needed to effectively design the structural foundations.

Often the report is issued for information only and is not a part of the construction contract documents. This is done so that the owner can try to limit liability for contractor interpretations and changed conditions. There is always language that states that the report represents only the actual spots examined and conditions can vary. This expressed caution is very real and it is very common to find unexpected soil changes or buried obstructions that are discovered during construction.

The objectives and the information required by the design engineer and the contractor differ dramatically. The design engineer needs to know what is needed to found the structure. The contractor wants to know what is needed to build the designed foundation. Generally, construction methods are the chosen by the contractor so long as no damage is caused. For that reason, the soil reports tend to be very vague when addressing construction methods.

Engineer objectives:

The design engineer wants to know what is under the surface to support the structures. To that end, the engineer needs to know several critical soil properties:

1. What is the allowable soil bearing pressure?
2. What is the expected foundation settlement?
3. What is the active soil load?
4. What is the passive soil loading?
5. What is the sliding friction factor?
6. What is the potential for differential settlement?
7. What is the soil liquefaction potential during an earthquake?
8. What are the seismic design accelerations?
9. Where is the groundwater table?
10. What is a permanent stable slope?
11. Will piling be required?
12. Can the native soil be used for backfill?
13. What are the criteria for the pavement sections?
14. Are hazardous wastes present?
15. How corrosive are the soils?
16. Will there be voids, obstructions or unstable soils?

Contractor questions

The contractor wants to know what the subsurface conditions are so that an accurate estimate of costs and time can be entered into a competitive bid. To that end the contractor will search the soils report to determine the following:

1. Where is the ground water and how much water

must be pumped?
2. Is there rock to be drilled and shot (sometimes blasting is not allowed)?
3. Can the ground be ripped with a bulldozer?
4. What excavation equipment and methods will be most effective?
5. Is there enough space on the job to store backfill materials?
6. Can the native material be used for backfill?
7. Will the native material need to be processed (screened/crushed) for backfill?
8. How much backfill must be bought and imported?
9. How steep can the temporary excavation slopes be cut?
10. Can obstructions be expected?
11. What compactive effort and equipment is needed for backfilling?
12. Will excavation shoring be required?
13. What is the most effective shoring method?
14. Will the ground stand long enough to use trench shores or shields for pipe trenching?

The report is directed mostly to the design engineer and the contractor usually must make an interpretation of the information to develop a construction plan. This interpretation is often vital to the success of the project. If the report is ambiguous or fails to properly identify the ground conditions, the result is often a changed condition claim. These claims can entail lengthy delays, increased cost, disputes and lawsuits. It is important to read the entire report and understand that each geologist has a different style of describing the soils, as they are field sampling.

Geotechnical Report Contents:

The well-prepared Geotechnical report will be organized along the following outline:

1. Introduction: This will identify the project by location and name. It will also briefly outline the scope of the investigation.
2. Project Description: This will give an overview of the structures, with proposed foundation depths.
3. Field Exploration and Testing: This will identify the methods and equipment used to bore and test the soils.
4. Site conditions: This will describe the terrain, prior known land use, general area geology, groundwater, fault proximity, seismic shaking, landslides and other concerns such as sink hole or fracturing problems.
5. Recommendations: The various explorations and tests are translated into specific loading criteria, settlements, dewatering requirements, seismic accelerations, pavement sections and site coefficients.
6. Site observations: This is where the appeal is made that it is important to have Geotechnical experts review the actual excavation procedures and the warning that differing soil conditions may be found.
7. Maps: A general area map with geology and faults is usually included. Site maps with boring log locations are included.
8. Logs: This will contain the boring logs with soil densities, blow counts, ground water elevations, moisture, soil classifications and sample locations.
9. Test results: This section includes sieve analysis, optimum moisture plots, direct shear tests, cone penetrometer, contaminants and other various tests that are deemed necessary.
10. Seismic velocities: This procedure is used when hard rock is expected. The sound speed through rock is a good indicator of what methods will effectively excavate the ground.

The contractor must make an interpretation of the soils report in order to answer the 14 common questions. There are a number of clues in the report that will assist the contractor in making decisions to select the appropriate construction methods, productions and estimating earthmoving costs. There is no one indicator to show what the ground conditions really will be. The entire report must be read, absorbed and analyzed. The report will contain observations, recommendations and test results that must be individually interpreted.

The basic clues that must be understood to make an educated judgment of the soil conditions are:

1. Soil boring equipment
2. Recommendations for construction methods and slopes
3. Soil boring logs
4. Soil description (classification such as silty-sand)
5. Soil properties (hard, stiff, dense, loose, etc.)
6. Boring depth
7. Boring refusal
8. Blow counts
9. Soil moisture content
10. Soil dry density
11. Particle distribution curves (sieve analysis)
12. Atterburg limits (liquid limits and plasticity index)

13. Compaction test (optimum moisture for compaction)
14. Direct shear tests
15. Seismic velocity lines
16. Permeability

1. Boring Equipment:

The bore hole or test pit is advanced with a variety of equipment. Bore holes advanced with an auger means that the ground can be excavated with normal earthmoving equipment, i.e. backhoes, scraper, bulldozers and the like. Bores that are made with a pneumatic, carbide tipped drill or similar rock drill means that blasting or heavy ripping will be required.

Test pits are usually dug with a backhoe. The size of the backhoe makes a huge difference as to how easily the ground can actually be dug. A small rubber tired backhoe-loader will show refusal (unable to dig) on soils that can be readily excavated with large track mounted backhoes or heavy equipment.

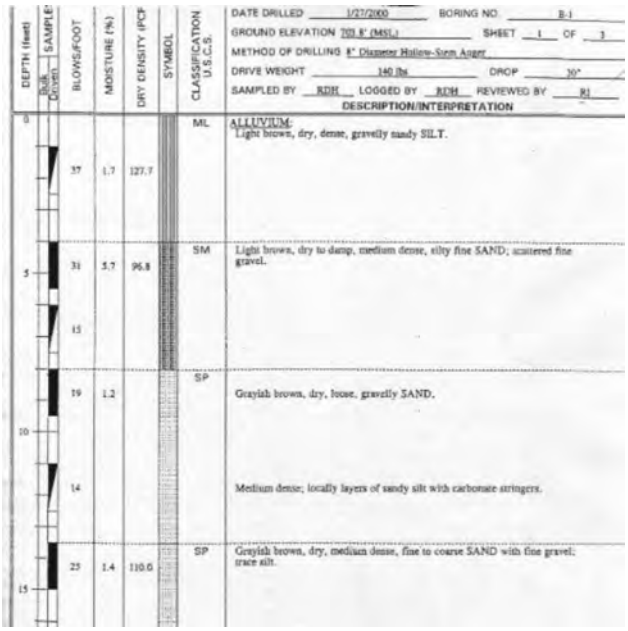
2. Recommendations:

If the report is concerned with settlement, liquefaction and suggests over-excavation; that usually means weak clayey soils. While these soils may be easy to dig, they may also be unsuitable for backfill and wet and sticky. Even though clayey soils may appear to be firm enough to drive on, they can start to pump with repeated heavy-wheeled traffic. This is when the moisture is worked toward the surface by the equipment pounding and turns the top layer to mud and the equipment will get stuck. If this condition is present it may be necessary to build aggregate haul roads. Rain and snowmelt will turn clays to mud and may be difficult to dry out enough to travel on.

3. Soil Boring Logs:

The boring logs will detail the soil layers by depth from the surface or by elevations. The log will contain such information as: soil classification, relative denseness of the soil, sampling points, sample recovery, water content, dry unit weight, blow counts per foot and ground water depth, drill refusal and if well casing was needed. Often the soil descriptions are subjective by being based on the experience and judgment of the observing geologist. How dense or hard the soil is often based on how quickly the drill can be advanced. The description is often based on the look, feel and sometimes smell or taste of the soil. The boring logs are a good place to start to understand the soil properties. The boring logs should be plotted on the drawings and on cross sections so the relationship of the excavation, structures is scaled to the soils and water table. If casing of the hole was necessary, it usually means the ground is too weak to stand on a normal construction excavation slope.

Below is an example of a well-presented boring log


DATE DRILLED 1/27/2000 BORING NO. B-1
GROUND ELEVATION 703.8' (MSL) SHEET 1 OF 3
METHOD OF DRILLING 8" Diameter Hollow-Stem Auger
DRIVE WEIGHT 140 lbs DROP 30"
SAMPLED BY RDH LOGGED BY RDH REVIEWED BY RJ

DEPTH (feet)	SAMPLE: Rdk. Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0		37	1.7	127.7		ML	ALLUVIUM: Light brown, dry, dense, gravelly sandy SILT.
5		31	5.7	96.8		SM	Light brown, dry to damp, medium dense, silty fine SAND; scattered fine gravel.
		15					
		19	1.2			SP	Grayish brown, dry, loose, gravelly SAND.
10		14					Medium dense; locally layers of sandy silt with carbonate stringers.
15		25	1.4	110.6		SP	Grayish brown, dry, medium dense, fine to coarse SAND with fine gravel; trace silt.

Note that the log presents the following data.

1. The date of the boring. This is useful information. Water table can fluctuate seasonally.
2. The boring log number, in this case: B-1. This will be plotted on a plan view so that the actual spot can be scaled to the work to be done.
3. The ground elevation at the boring is given: 703.8 (MSL). MSL is for mean sea level. Marine construction often uses mean lower low tide elevation as a reference. The difference between these references can cause mistakes, so be sure of the reference elevation.
4. The drill used was a hollow stem auger. This means that the ground was not rock, since and auger will not penetrate rock that requires blasting or heavy ripping.
5. The soil is logged and classified by depth from the ground surface. Sometimes the log will also reference elevation.
6. The blows/foot is number of times the 140 lbs drive weight dropped 30 inches needs to penetrate one foot. The 37 blows per foot confirm the description of dense or well-compacted soil.

7. The moisture content range of 1.2 to 5.7% means the soil is very dry and will require a lot of water to achieve compaction.
8. The dry density in the top 4 feet is 127.7 pound per cubic foot (PCF). This indicates a well-graded soil with a low void ratio. It can be expected to have significant cohesion and friction angle.
9. The soil between 5 and 8 feet of depth has a dry density of only 96.8 pcf. This indicates the soil is poorly graded and a low percentage of fines. This soil will probably have little or no cohesion. That means it may not stand on a construction slope as steep as 1H to 1V.
10. The soil classification descriptions and relative compactions are shown as loose, dense, etc.
11. Note that no ground water is shown. If ground water is found it will be shown at the depth of encounter as an inverted triangle with a line under it. Sometimes this symbol is small and easy to miss.

4. Soil Descriptions:

This will usually identify the soil by classification of particle sizing such as cobble, gravel, sand, silt, or clay, etc. Most soils are a combination of these classifications, meaning there is a gradation of material. Sand and larger grains are often referred as cohesion less soils. Without clay or silt fines sand, gravel and cobbles will not have cohesion (glue) to bind the soil and give it shear strength. Soils with clay or silt are often referred to as cohesive soils, as they are capable of developing significant shear strength.

5. Soil Properties:

Usually soils are described as loose, dense, hard, stiff, soft, etc. Usually, the relative density terms of: loose, dense are applied to sands and gravels. Terms such as soft and stiff are usually applied to clays and silts. Hard can mean rock or cemented soils, although if the soils are cemented the geologist will usually mention that fact. Loose or soft ground means that the ground may not support a slope as steep as 1H to 1V. Dense sands or gravels are no guarantee that the gravels will stand on a steep excavation slope, as they may be tightly packed but have little or no fines to cause cohesion. Cemented soils can be caliche, volcanic tuff, or pyroclastic ash. These soils can be some of the most difficult and expensive materials to excavate. They can have a relatively low density and show as being relatively soft rock. However, they tend to absorb blasting energy and almost impossible to penetrate with a ripper tooth.

Soil Types:

The basic soil types are:

1. Clays and silts: These are soils where the grains are less than 0.005 inches in size (less than #200 sieve size).
2. Sands: The grain sizes are between 0.25 and 0.005 inches in size. (#4 to #200 sieve size)
3. Gravels: The grain sizes are between four and 0.25 inches in size. (4" to #4 sieve size)
4. Cobbles: These are rounded rocks that are between 12 and 4 inches in size.
5. Boulders: These can be over 20 feet in size.
6. Rock: Massive formations that require blasting or heavy ripping to excavate.
7. Any combination of the above. Most soils usually contain more than one soil type, for instance, a soil classified as sandy-gravel is gravel-containing sand.

Soil Classifications:

1. ML – Silt
2. CL – Lean Clay
3. OL – Low Plasticity Organic Soil
4. OH – High Plasticity Organic Soil
5. MH – Elastic Silt
6. CH – Fat Clay
7. GW – Well Graded Gravel
8. GP – Poorly Graded Gravel
9. GM – Silty Gravel
10. SW – Well Graded Sand
11. SP – Poorly Graded Sand
12. SM – Silty Sand

The soil classifications are often shown as the combined ones when no single classification is accurate. For example, GW-GC stands for well graded gravel with clay. The soil classifications are another step in the process, but they do not tell us how hard or soft the ground is or what excavation difficulties are to be expected. The soil classifications refer only to the grain size of the soil and little of the other ground properties.

6. Boring Depth:

Usually the boring logs are advanced well below the planned excavation depth to insure that accurate formational trends can be plotted and no weak layers are present near the foundation grade. When the borings are terminated above or just at the planned

excavation depth, you must be very wary. This means you cannot be sure of what may be encountered at the bottom of the excavation. Is there going to be rock or water that must be handled? Did an obstruction halt the drilling effort?

7. Boring Refusal:

This is usually indicated at the bottom to the boring log, if it occurs. If all refusals are well below the planned excavation depth, it will not be a major concern. If a small percentage of the borings have met refusal in the excavation limits it usually means that there are isolated obstructions. It is not possible to determine what is the obstruction unless the soils report or site history reveals the object. A small isolated boulder can stop an auger drill and be of little concern. On the other hand, it could be a ridge of solid rock that will be expensive to remove.

8. Blow Counts:

This is a very important measure of soil properties. This is a standard penetration test where a 140-pound weight is dropped and the number of blows to advance the point one (1) foot is counted. Obviously the more the blows the harder the soil. Loose or soft soils will show blow counts of less than 10. Blow counts of 10 to 50 blows per foot usually mean the ground will be fairly easily excavated. When the blow counts are over 50 but less than 100, ripping of the ground is very likely. When blow counts exceed 100, the ground may be very difficult to excavate and require blasting or hoe ram effort.

9. Soil Moisture Content:

Optimum compaction moisture is usually between 8 and 15% of the dry weight of the soil. Ground water will show about 25 to 40% moisture by weight of the dry soil. Supersaturated clay can be 50% water. Those are oozing mud that will not support the weight of even low ground pressure tractors.

When the moisture content is more than about 15%, the ground is too wet. Equipment can bog down by pumping clays and silts after only a few passes and turn the haul road to mud. Clean sands and gravels are usually not a problem unless the excavation is below the water table. These soils are usually free drain enough that no special effort is required to dry them out. On the other hand, overly wet clays can be a serious problem to handle. Wet clay will tend to stick to tires and truck beds greatly reducing load and haul efficiency. Extensive effort may be required to reduce the moisture for fill and compaction. The clay or silt may require spreading; disking and/or mixing with dry material. This can be a very expensive and time-consuming effort.

10. Dry Soil Density:

Normal soils will have dry densities between 95 and 130 pounds per cubic foot (pcf). Solid rock and heavy metallic ores can have densities exceeding 150 pcf. Loose cohesionless sand will usually have a density of about 90 pcf. Volcanic cinders can be as low as 50 pcf. Soil density by itself tells little about the soil properties. Volcanic tuff can have a density of less than 100 pcf and be some of the most difficult material to excavate. Dense rock that is fractured and/or weathered can often be easily excavated.

11. Sieve analysis

12. Atterburg limits (liquid limits and plasticity index)

13. Compaction test (optimum moisture for compaction)

14. Direct shear tests

15. Seismic velocity lines

16. Permeability

More and detailed explanations can be obtained on an online sources of understanding geotechnical reports as an engineering and construction reference is available at PDHONLINE.com for further study.

Kudos to Southern Centre BAI

M.Karthikeyan
Past President BAI

It was a proud moments to all of us in the BAI Annual General Meeting 2015 held at Mumbai on 5th Sept 2015. While announcing the awards for the achievements for last year announcement that BAI – Southern centre has bagged once again the Overall Outstanding Centre for the year 2014-'15, that too for the eighth time consecutively.

This year new category of awarding to the Best publications is added. It was more joyful to be announced that the publication of ''SOUTHERN BUILDER'' of our centre was awarded as outstanding bulletin of this year. All these were possible because of Members' involvement, E.C, G.C. and M.C.members contributions, office bearers' dedication, the team lead by Mr.R.Siva Kumar as its chairman, all factors keep our centre aloft from all other centre.

May be the committee meetings held every month, special meetings organized to meet and redress the problems of builders in taxation, contract conditions, voicing for the unprecedented price rise in building materials, in all the centre took active role in meeting the concerned works department central and state governments, public sector undertakings ,taking along the members of other similar organization. The problem of building regulations in CMDA, preparation of schedule of rates PWD, PF, ESI, Service Tax matters the centre took right and quick action by the team heading the organization.

The centre has conducted training programs in Construction Management, Site Engineers training, Skill Development programs for labourers , Safety in Construction, Seminars on green building concept, Repairs and rehabilitation methods and Modern Construction Chemicals etc.,which are needy and useful to members.

To benefit the construction industry, a mega exhibition BAICON was conducted in June 2014 inaugurated by Honorable Shri Venkaiah Naidu, Union Minister of Urban Development & Housing which was well received by the participants. Instrumental for this exhibition's success is our past president B.Seenaiahji and our leader Bheesma R Radha Krishnan. This exhibition has given a big boost to many construction machinery manufacturers spread all over the country. The services of the office bearers, chairman. R.Siva Kumar, and past chairman Mr. Mu. Moahan, J.R.Sethuramalingam, Past Vice President and many other made the function a great success.

BAIMAT exhibition was also conducted in Jan 2015 with Mr. L.Moorthy as its chairman, exclusively for the building materials. The exhibition was a great success because of the all out services of Mr.L.Moorthy, the then vice president of BAI and ably supported by Mr.Ragunathan as TN State Secretary.

Another event of the year was House Hunt exhibition making the Builders, Promoters, Realtors, Bankers to exhiht their product to the public. Well attended by nearly 30,000 people.

To meet the enthusiasion of its members annual family meet of the members, and also a sports meet (new event in this year) were ably conducted with team leaders.

SOUTERN BUILDER

All of us know that from the day Mr.Mu.MOAHAN took charge as its editor, the value of the bulletin has gone up very high. The brilliant job done by the editor, took the image of our centre to a greater height. His dedicated service and efforts with positive accomplishment contributed a lot for the award. The contents were very rich, events, photographs, tech. papers from various experts in construction industry besides the history of BAI from the inception from 1941, finely crafted by Bheesma R.Radha Krishnan are very much appreciable . The bulletin is the brought out in full & full art paper with high standard with nice printing. The articles were both in English and Tamil wherever possible. All these made the southern Builders as outstanding publication.

Madras High Court

Ravi Meenakshisundaram
ADVOCATE
madraslawfirm6@gmail.com

To

18th September 2015

The Chairman/Editor,
Builders' Association of India
Southern (Chennai) Centre
'CASA BLANCA', Old No.6, New No.11,
2nd Floor, Casa Major Road, Egmore,
CHENNAI – 600 008 Tel. (044) 28192006, Telefax : 28191874
Email: baisouthern@yahoo.com

Dear Sir,

Sub: Appreciating SOUTHERN BUILDER.

Please accept my thanks and congratulations for bringing out August issue of SOUTHERN BUILDER on time its first success.

I always go through SOUTHERN BUILDER. It seems one can always identify experiences in his own construction site with those described in the SOUTHERN BUILDER. SOUTHERN BUILDER articles help every builder to realize that their problems are typical, and can solve them in constructive ways.

Right from '' **YOUR SEARCH ENDS HERE'',** Quotes of Shri.Vivekananda and Shri.APJ, Regulation developments by Mr.Ramprabu, Specification by Mr.Nallathambi, Mr.Ramajeyam's damage pattern, Mr. Ramanathan's Roman cement concrete, Mr.Karthikeyan's water proofings,Mr.VGS's recycling plant are really a food for thought.

Pavazhavizha Ninaivalakal a tribute to all the readers and builders fraternity, I appreciate the remembering sense and capacity of Mr.RR.

S.D.Kannan's GST is the need of the hour, Pro & Cons has to be discussed in length for the benefit of the Builders. NSICL is a Boon and Tips to our Builders for Promoting themselves to higher level.

I see so much of the positive side and it's refreshing, upbeat report on the good things that happening. I think this issue will be a great motivator for many builders who need a little extra push.

Our builders are doing a good job with limited resources, and they appreciate all the help BAI can give them. Thanks again for such uplifting coverage.

Thank you and keep these good articles coming. ''BAI - **YOUR SEARCH NEVER ENDS''**

Regards,

Ravi meenakshisundaram

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Chamber : # 193A, Additional Law Chamber, Madras High Court, Chennai - 600 104. E-mail:ravimeenakshisundaram@yahoo.com

Regulation for Group Developments

S. Ramaprabhu, Joint Secretary

To be continued..,

(24) Basement Floor:-

(a) The height of basement floor shall not exceed 1.2 metres above ground level and the headroom shall be minimum 2.4 metres.

(b) No part of the basement shall be constructed in the minimum required set backspaces, required for the movement of fire fighting vehicles/ equipments.

(c) In cases where second basement is proposed for parking and incidental uses, sufficient provision for lighting and ventilation and also for protection from fire to the satisfaction of Directorate of Fire and Rescue Services shall be made.

(d) During the construction of the basement floor, it shall be sole responsibility of the planning permission holder to ensure that the building / structure in the adjoining sites are not weakened / damaged.

(25) Security Deposit:

The applicant shall deposit a sum at the rate of Rs. 50 per square metre of floor area as a refundable non-interest earning security and earnest deposit. The deposit shall be refunded on completion of development as per the approved plan as certified by Chennai Metropolitan Development Authority; if not, it would be forfeited.

(26) Display Board:

(a) The details of the development for which planning permission issued, date of expiry of permit etc., shall be displayed in the format prescribed by the Authority on a board of size at least 60cm x 120cm.

(b) The applicant shall pay a sum of Rs. 10,000/- (Rupees ten thousand only) as earnest money non interest bearing refundable deposit and same should be utilized for the purpose of installing the prescribed size board on the site by CMDA, in the event of the applicant not fulfilling the conditions stated in (a) above.

(c) If the applicant fulfills the conditions (a) above, the deposit shall be refunded after production of the completion certificate.

(27)Group development exceeding 50 dwelling units or where the extent of the site on which it is proposed exceeds 1 hectare it shall be designed and the plans signed by a qualified Architect.

(28)Notwithstanding anything stated above, Group developments for EWS housing, and special projects undertaken by CMDA may be approved subject to the conditions as may be stipulated by the Authority.

29. Special rules for multi-storeyed Buildings

(a) Site Extent:- The minimum extent of site for construction of multi-storeyed buildings shall not be less than 1500 square metres.

(b) Road width:- The site shall either abut on a road not less than 18 metres in width or gain access from public road not less that 18 metres in width through a part of the site which can be treated as an exclusive passage of not less than 18 metres in width.

Provided further that multi-storeyed building may be permitted with limitations on maximum FSI and maximum height of the building on a site abutting or gaining access from a public road of min. 12m/ 15m in width, or gain access from public road not less that 12m /15 metres in width through a part of the site which can be treated as an exclusive passage of not less than 12m / 15 metres in width, subject to compliance of the planning parameters stated in the Table under sub rule (2) below.

Explanation:

(i) Road width means the road space as defined in DR no. 2 (35). The qualifying road width for permitting multi-storeyed building shall be available at least for a stretch of 500m along the length of the road abutting the site and the stretch from a junction can be straight or a curve or zigzag or combination of the above.

To cite examples:

(a) If the road over its general length is of 18 metres width, but because of some kinks in front of the site one end is 17.8 metres and the other end is 18.2 metres is acceptable.

(b) If the general road is of width less than 18 metres width, but only widens opposite to or nearer to the site is more than 18 metres, is not acceptable.

Courtesy: CMDA….. To be continued

ESIC Stay Order

As authorised by the Managing Committee Meeting at Mumbai on 12th September 2015, BAI Madurai Centre, filed a Writ Petition, on coverage of construction workers by the ESIC, at Madurai Bench of Madras High Court and obtained 'Stay Order', which is attached herewith. As ESIC being a Central Act, the Stay is valid throughout the country.

We congratulate BAI Madurai Centre, particularly Shri V. Ramachandran, Past President and Past Trustee, for the remarkable & commendable yeoman services done by them for and on behalf of all BAI Members, by obtaining the Stay Order within such short notice.

BEFORE THE MADURAI BENCH OF MADRAS HIGH COURT
(Special Original Jurisdiction)

Monday, the Twenty First day of September Two Thousand Fifteen

PRESENT

The Hon'ble Mr.Justice T.RAJA

WP(MD) No.16996 of 2015
and MP.(MD).No.2 of 2015

M. SELVAKUMAR
CHAIRMAN-MADURAI CENTRE, BUILDERS
ASSOCIATION OF INDIA, NEW NO.7/C53,
THIRUNAVUKKARASAR STREET, ALAGAPPAN NAGAR,
MADAURAI 625 003. ... PETITIONER/PETITIONER

Vs

1 EMPLOYEES STATE INSURANCE
CORPORATION, REP. BY ADDITIONAL COMMISSIONER(REV) PANCHDEEP BHAWAN, CIG ROAD, NEW DELHI 110 002.

2 THE REGIONAL DIRECTOR,
ESI CORPORATION, MADURAI REGION, MADURAI.
... RESPONDENTS/RESPONDENTS

Petition praying that in the circumstances stated therein and in the affidavit filed therewith the High Court will be pleased to issue a WRIT OF CERTIORARI to call for the records relating to the impugned notification No.P-12/11/11/60/2010-Rev. II dated 31.07.2015 passed by the 1st respondent and quash the same and pass such orders as this Honble Court in WP.(MD).No.16996 of 2015 and

ii) to stay the operation of the impugned order notification No.P-12/11/11/60/2010-Rev.II dated:31.07.2015 passed by the 1st respondent (MP.(MD).No. 2 of 2015) pending disposal of the abvoe WP.(MD).No.16996 of 2015 respectively.

ORDER : These petitions coming on for orders upon perusing the petition and the affidavits filed in support thereof and upon hearing the arguments of M/S.T.ANTONY ARULRAJ, Advocate for the petitioner in both the petitions and of Mr.K.C.Ramalingam, Advocate takes notice for respondents in both the petitions, the court made the following order:-

Mr.K.C.Ramalingam, takes notice for respondents. As his request post after four weeks.

In the meantime, status quo to be maintained.

sd/-
21/09/2015

/ TRUE COPY /

Sub-Assistant Registrar (C.S.)
Madurai Bench of Madras High Court,
Madurai - 625 023.

1471732

BAI CONGRATULATE

Mr. S.N. SUBRAMANYAM
For having elevated as
Deputy Managing Director
& President of L&T

Mr.S.N. Subrahmanyan or SNS as he is popularly known amongst his colleagues is the Whole Time Director, Deputy Managing Director and President, Larsen & Toubro. In addition, he heads L&T Construction (erstwhile ECC), as Non-Executive Director on the Board of L&T Infotech Limited and President L&T Infotech and President L&T Technology Services. He is also responsible for the Metallurgical & Material Handling (MMH) and Shipbuilding business verticals.

Mr Subrahmanyan is a civil engineer with post graduate qualification in business management. Commencing his professional career in Larsen & Toubro after graduation in 1984, he began as a project planning engineer responsible for costing and job planning. His wide ranging abilities and remarkable acumen soon came to the fore, as he was handpicked for senior responsibilities and became principally responsible for developing the MIS, budgets and strategic planning for L&T Construction. He has also attended the Executive Management Programme at London Business School.

Mr Subrahmanyan's achievements early in his carrier include securing prestigious orders for the building and construction of several IT, commercial, housing, public and hospital building projects across India. He successfully laid a strong foundation for business development with India Inc. and nurtures long-lasting relationships with clients and associates. A standout achievement of Mr. Subrahmanyan was the crucial role played in securing and managing EPC contracts for the construction of four major international airports in India at -Bengaluru, Hyderabad, Delhi and Mumbai. The contract for Delhi International Airport is the largest secured by L&T till date. His visionary leadership enabled the successful securing / executing of prestigious metro rail projects in Delhi, Chennai, Bangalore, Hyderabad and Mumbai.

Mr.Subrahmanyan was largely responsible for establishing L&T Construction as a significant EPC player in the Middle East. He has spearheaded and won several large projects in Oman, Qatar, Abu Dhabi and Saudi Arabia like the Salalah Airport in Oman and a big interchange and road project in UAE. The Riyadh Metro project is one of the largest international orders bagged by L&T thus far; while the Doha Metro, the AL-Wakrah Road Project both in Qatar and the Abu Dhabi Airport airside works have been won in the face of stiff international competition. He has also led the spread into Africa and L&T Construction is already making its presence felt especially in North and East Africa.

Mr. Subrahmanyan is a member of the Board of Governors of Construction Industry Development Council (CIDC) the apex body of construction fraternity in India. He is also a fellow of Institution of Civil Engineers, UK. He is also a fellow of Institution of Engineers, (India)

He has won numerous awards throughout his career, including Construction Week magazine's 'Infrastructure Person of the Year 2012', 'Contractor CEO of the Year' at the Qatar Contractors Forum & Awards function in 2014 in Doha, accorded the Leading Engineering Personality award in the event 'Glimpses of Engineering Personalities' by the Institution of Engineers (India). He has also been voted the 'Construction World Man of the Year 2015' by Construction World magazine.

Despite his busy schedule, Mr.Subrahmanyan still finds time to give back to his community and pursue his passion for books, music and cricket.

சேவை வரி விளக்கக் கூட்டத்தில் ஆணையர் திரு. G. ரவீந்திரன், IRS அவர்களின் உரை

சேவை வரி கூட்டத்தில் கலந்து கொண்டவர்களில் ஒரு பகுதி

ஆணையர் திரு. G. ரவீந்திரன், IRS அவர்களுக்கு நினைவுப் பரிசு வழங்குதல்

சேவை வரி கூட்டத்தில் கலந்து கொண்டவர்களில் ஒரு பகுதி

அறக்கட்டளையின் பத்திரங்களை பதிவுத்துறையிலிருந்து பெற்றுக்கொடுத்த நமது நிரந்தர உறுப்பினர் திரு. K.G. ஜானகிராமன் அவர்கள் கவுரவிக்கப்பட்டார்.

கோவை மய்ய பவள விழா நிகழ்வு

மாநில பொதுப்பணிக்குழுத்துணைத்தலைவர் திரு. R. முத்துக்குமார், புதுக்கோட்டை மய்யத்தலைவர் திரு. M. முருகேசன், துணைத்தலைவர் திரு. M. அரவிந்த் ஆகியோர் கலந்து கொண்டு ஆதரவு தெரிவித்தனர்.

A Brief Note on Service Tax Meeting Held on 29th September 2015 at Savera Hotel

S.D. Kannan, Chairman, Taxation Committee

Our Southern Centre organized a meeting on service tax issues by inviting officials from the Service Tax Commisionerate – II Chennai on 29th September 2015 at Savera Hotel.

Shri.G.RAVINDRANATH IRS Commissioner and his team of officials participated in the meeting and a Power Point Presentation was given by Smt. Nalina Sofia IRS – Asst. Commissioner, Covering all aspects of various services relating to construction industry.

a. Works contract services
b. Abatements
c. Reverse Charge mechanism
d. And all other issues relating to constructions industry were covered and explained to the participants.

All quarries and doubts raised by the participants were clarified by the commissioner and advised participants to pay the tax collected immediately within due dates to avoid interest, penalty and other proceedings.

Meeting was attended by members from Kumbakonam, Erode and other centers and also officials/employees of members of southern center. Over all the meetings was very useful to all participants and were happy to interact with the official in a cordial manner.

We should appreciate and place on record the effects taken by Mr.O.K.Selvaraj Chairman along with the Mr.R.Sivakumar, Past Chairman and Mr.K.Venkatesan Hon. Secretary.

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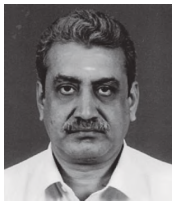
Thanking you in anticipation your early response.
With regards,

K. Venkatesan
Hon. Secretary

Rapid Wall Technology for Affordable Mass Housing



Er. P. Dinkar, B.E. F.I.E. F.I.V.
Chartered Engineer & Reigistered Valuer Consultant
Rapidwall Construction Technology
Mob: 98410 92799

Rapidwall is a revolutionary hi-tech building technology, Rapid wall is energy efficient, eco-friendly and world's largest load bearing, light weight, pre-fabricated building panel. It is manufactured in 12m long x3m high/wide and 124mm thickness with modular cavities as show in Firgure 1. It is produced with high quality gypsum plaster, reinforced by glass fibre roving and other harmless chemicals and special addictives. One of the advantages of pre-fabricated Rapid wall is that it can be used in combination with reinforced concrete (RC) in cast-in-situ monolithic construction. When concrete is in-filled in the cavities of panel with M20 /M25 concrete, its load bearing capacity increased 8.5 times or 850% from 160 kN/m to 1360 kN/m. Rapidwall and RC become composite material, giving advantages of both Rapidwall and RC in building construction.

Rapid wall is a technological break through and turning point in the history of gypsum as a building material for housing & building construction. Rapidwall building will be resistance to fibre, water, earth quakes and cyclones and also are free from rot, termites and corrosion. Rapidwall housing is strong, durable, eco-friendly and affordable.

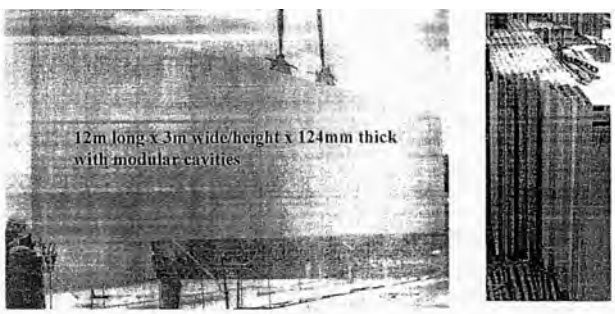


Figure 1: Rapid wall Panel

Rapidwall building system consists of both Rapidwall panels and reinforced concrete, Both walls and floors are built with Rapidwall panels in combination with RCC. Rapidwall cavities are in-filled with concrete as per structural requirement. When used as non load bearing or partition walls, the cavities need not be in-filled with concrete. Based on the number of floors, from single storey to low rise, medium rise and high rise (upto 10 storeys) appropriate vertical rebars can be provided in the cavities base on the structural design. If required, Two rebars in each cavities can also be provided. Axial load carrying capacity of empty panel itself is 160kN/m(16 tons/m) with a shear strength of 21.6 kN/m. For small single storey housing does not require RC infill except for wall corner joints and either sides of door / window frame fixing.

When concrete is infilled in all cavities, axial load carrying capacity gets enhanced to 1360 kN/m. As per structural requirement based on number of floors, size of rooms, usage of building, the wall panel cavities can be suitably in-filled with RC to meet its structural demands. Based on the lateral load requirement vertical reinforcement bars is also to be provided.

Rapidwall for floor / roof slabs:

Rapidwall (RW) in combination with RC can also be used as structural floor/roof slab system as composite floor/roof slab with perfect connection between walls and floors / roof slab.

a) Typical cross section of RW/RC composite slab with embedded micro beams as series of "T-beams".

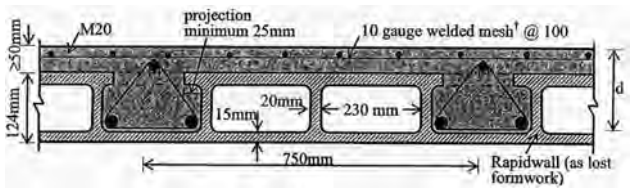


Figure 2: Typical cross-section of RW-RC floor slab – Rapidwall with embedded micro beams

b) As based on the span and live load / usage, like commercial / institutional/public building etc, reinforcement of micro beam and its positioning has to be designed.

c) Based on span and usage, thickenss of RC screed can be increased above 50mm.

d) T in case welded mesh is not available, 6mm bars at 150mm spacing, in both ways, may be used.

RW-RC composite slab system is integrated with external and internal walls, is consists of net work of embedded RC micro beams as illustrated in in Figure 3 (series of "T" beams oriented to the direction of shorter span) with RC screed and horizontal embedded RC tie beams. Based on the structural requirement, span length, live load factors for residential or commercial / public or industrial building, thickness of concrete screed or reinforcement in micro beam can be designed. As per requirement, stirrups in micro beams can be in triangular or rectangular shape which depends on number of bottom and top reinforcement bars.

Concrete between walls & floor slabs with embedded horizontal tie beams beneath the slabs over all the walls:

In Rapidwall building designing and construction for connectivity between floor / roof slab and structural walling system at external walls and internal walls

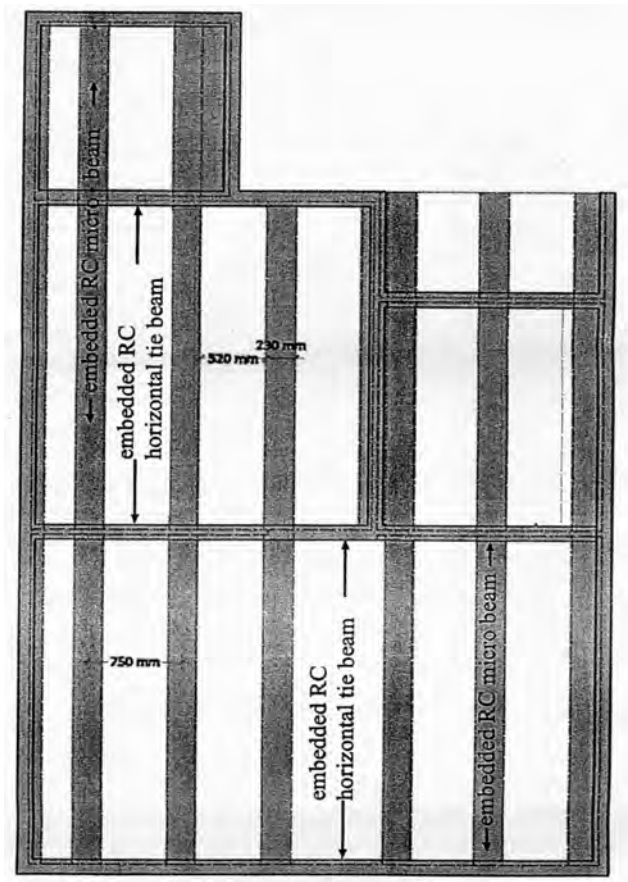


Figure 3: Network of embedded RC micro beams and horizontal tie beam

has perfect connection system is illustrated in Figure 4, Floor / roof slab is also integrated with horizontal embedded RC tie beam under the slab over internal walls and external walls all around. Vertical re-bars in walls below the floor slab pass through the tie beam and give RW/RC floors/ roof slab system can be used upto span of 5m in residential building without under beams. It can be used for floor / roof slab in commercial / public buildings with higher live load upto span of 4m without under beams. With under beams, span of floor / roof slab can be increased. However, there in no limitation on length of longer side, as RW/RC composite floor slab system acts a one way slab.

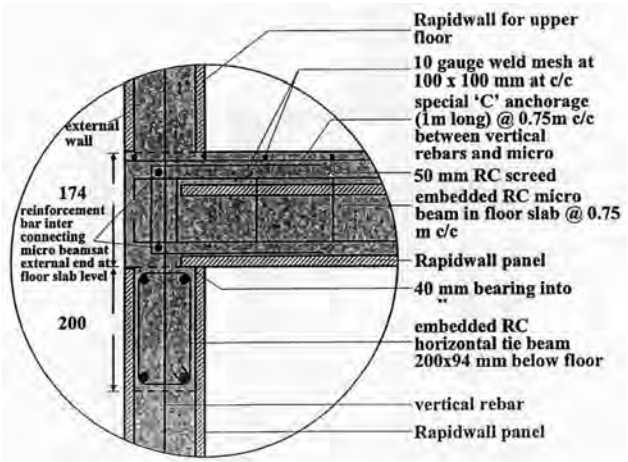


Figure 4: Connection between Rapidwall and intermediate floor slab at external walls

In multi strey Rapidwall buildings more than one or 2 storeys, there is RC thin monolithic framed structure with RC plinth beam in the base, embedded RC columns inside cavities, embedded RC inter connected net work of horizontal tie beams top of all the walls including internal walls, foor / roof slabs with net work of embedded RC micro ebams and RC screed acting series of T beams.

Connection between super structure & Foundation:

Rapidwall is used for the super structure part of building above basement level. Foundation. on is conventional construction using traditional materials based on soil / site condition. However, there can be saving in cost of foundation for Rapid condition. However, there can be saving in cost of foundation for Rapidwall building, especially in multistory storey construction, as there will be substantial reduction in dead weigh approximately 40% compared to conventional building.

For all types of buildings, there will be net work of RC plinth beams at basement level above ground level.

In Rapidwall buildings, before casting of outer and internal cross walls, RC plinth beams are cast, "L" shaped start up rods / rebars (same dia as that of vertical rods as per structural design) with minimum 150mm deep and 45 times bar diameter lap length up wards are to be inserted at precious location where the cavities are to be filled with reinforced concrete, as shown in Figure 5. In the case of raft foundation, there will be deep RC stem wall from raft foundation to basement level as shown in Figure – 6.

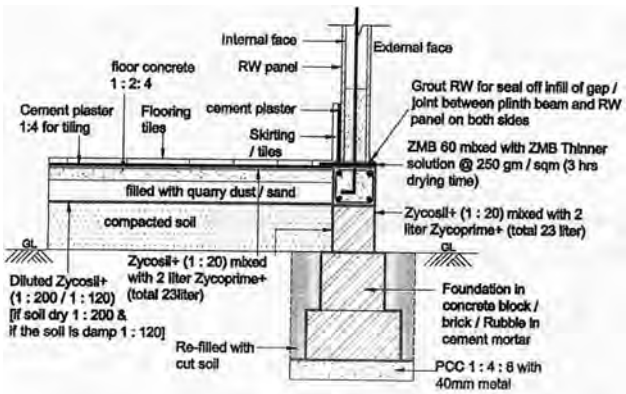


Figure 5: Foundation, basement, plinth beam and start-up for erection of Rapidwall panels

In this manner, the connection at the ground storey between super structure and foundation, spread over the entire wall length over the network of RC plinth beams is ensured.

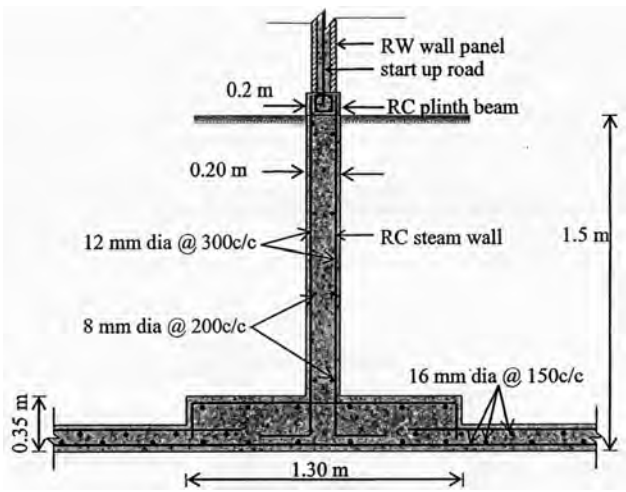


Figure 6: Typical connection details of RW walls with raft foundation

Concrete in-filling of panel cavities:

M20 or M25 concrete as per structural design, using small size nozzle of 2m long to insert into the cavities (which are to infill concrete), to pour concrete directly from ready mix concrete or manually from top of the panel to maximum 1m height from bottom in first stage. After a gap / interval of 30-40 minutes (initial setting time of concrete) in second stage in-fill and similarly 3rd stage infill upto horizontal tie beam bottom. This is to avoid bursting / bulging of bottom side of panel due hydrostatic pressure if concrete is infilled / poured at one stretch fall to full height from 3m.

Embedded RC lintel cum sunshade for external windows:

As in the case of conventional building construction, over window or door opening etc embedded RC lintel can be provided by cutting one side of skin / flange of panel to required length and height using electrically operated hand saw or marble cutter. In practice suitable window frame or door frame can be installed in position and provide in position of reinforcement including stirrups. Reinforcement including "L" anchorage for RC sunshade (as shown in Figure 7) can also be provided after providing necessary shuttering . Concrete for lintel can be poured as part of infilling of wall cavities and concreting of sunshade can also be done simultaneously to cast as monolithic and provided covering and required water proofing treatment as required.

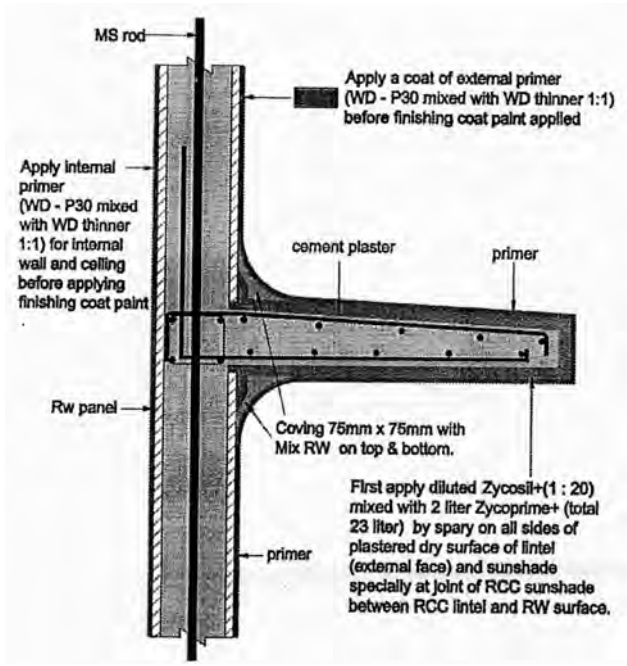


Figure 7: Lintel cum RC sunshade integrated with RW wall

Wall corner joints:

Conventionally building built brick by brick. Whereas Rapidwall building built wall by wall. Wall corners joints including "L" or "T" shape joints are built with RC as illustrated in Figure 8. To prevent ingress of water

through construction joints in external walls and wet areas, water proofing treatment using suitable water proofing chemicals is to be done as per guidelines given in construction manual.

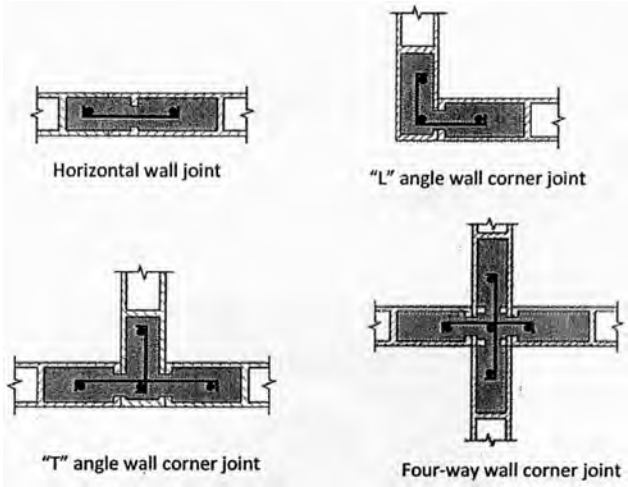


Figure 8: Wall corner Joints

Embedded RW-RC columns for pointed loads:

Unlike RC framed structure, in Rapidwall building, most of the walls take varying loads. To take pointed Axial loads, it is necessary to provide column and this can be provided using panel cavity itself integrated to waling system as illustrated in Figure 9 below.

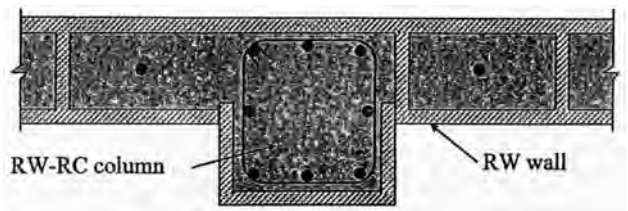


Figure 9: Embedded RW/RC column

In this in Mumbai, Cochin, vizag, and in other places have built Rapidwall buildings. RCF has proposed to construct 8 storey Residential high rise building. Structural design is done by IIT Madras (Indian Institute of Technology Madras), satisfying earth quake resistance requirement of National Building Cod).

Stair case:

In conventional building Construction of stair case consume substantial time. In Rapidwall building using Rapidwall in combination with RC, can be used for constructing stair case waist slab and mid landing or floor landing which saves a lot of time. With concrete or bricks or concrete blocks steps can also be made. See the figure 10, in which using Rapidwall, in combination with RC stair case construction is illustrated.

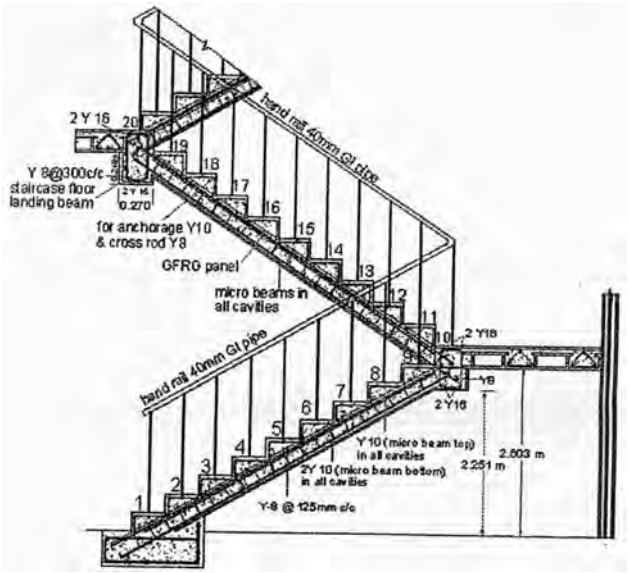


Figure 10: Cross section of stair case

Embedded RC under beams for slabs of larger spans:

Whenever floor or roof slab has more span, embedded RC beam using panel can be provided as illustrated in figure 11. Similar under beams for stair case landing etc can also be provided where ever required. Beams with higher depth can also be provided as per structural requirement using double panel (Fig. 11.a) By this without usual shuttering embedded RC beams can be made cast in situ, which saves a lot of time.

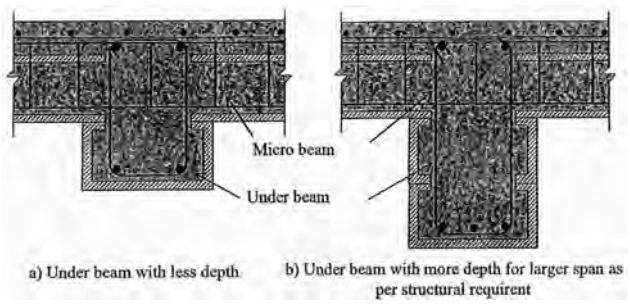


Figure 11: GFRG-RC composite embedded cross beam/under beam in long span floors

Walling system in multi-storey / high rise Rapid wall building:

Based on the lateral load requirement of the structure rebars can be inserted in cavities. It can be in alternative cavities, or every 3rd cavities or in every cavities. Similarly the rebar from 8mm or 10 mm or 12mm or whether single rebar or 2 bars is based on the structural requirement.

Figure 12 illustrates longitudinal section of an 8 storey Rapidwall building in seismic zone 3. As per

the structural design satisfying building code satisfying earth quake resistance requirements, for GF & 1st Floor 12mm 2 nos rebars are provided. For 2nd floor 2 nos 10mm rebars and for remaining upper floors 2 nos, 8mm rebars. Below the intermediate floor slab, as required under building code, horizontal embedded RC tie beam below slab over all the walls around as well as internal walls provided. Intermediary floor slab and roof slab is also with RW-RC composite slab with perfect connection between floor / roof slab.

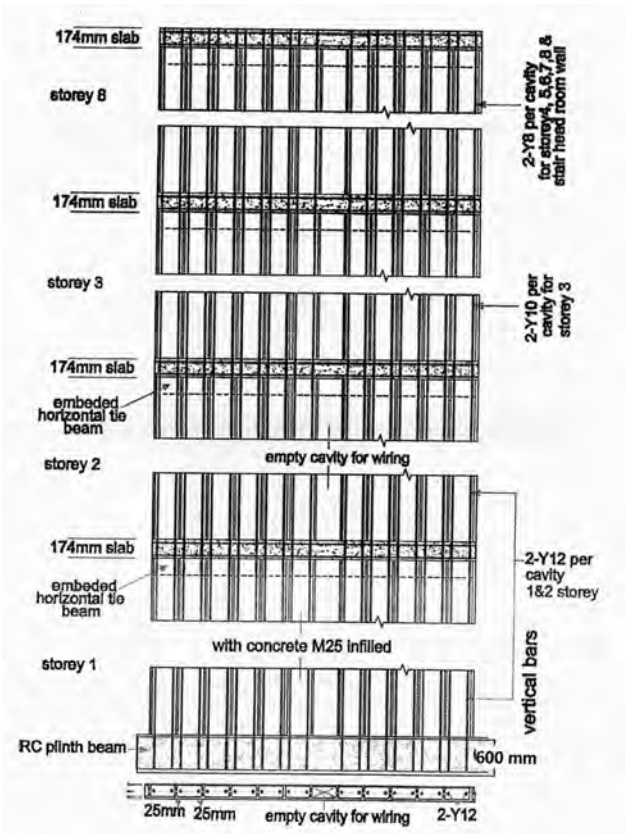


Figure 12: Longitudinal sectional view of walls showing vertical reinforcement details

RW-RC Hybrid Building System for high rise buildings:

With Rapidwall as load bearing wall can build only up to 10 floors / storeys. This is one of the limitations of RApidwall & Rapid building technology. To overcome this limitation IIT Madras has developed RW-RC hybrid building system. By this without limitation of number of floors Rpaidwall can be used as non load bearing infill walls and panel for floor slab / roof slabs. In hybrid system, the Rapidwall is used as infill walls and slabs in conventional RC framed construction as illustrated in figure 13.

The use of Rapidwall as infill walls has many advantages over conventional masonry walls. The dead load is reduced considerably. Hence a seismic force is reduced and therefore design load is reduced substantially. Thus reducing structural cost of the RC frame elements and foundation.

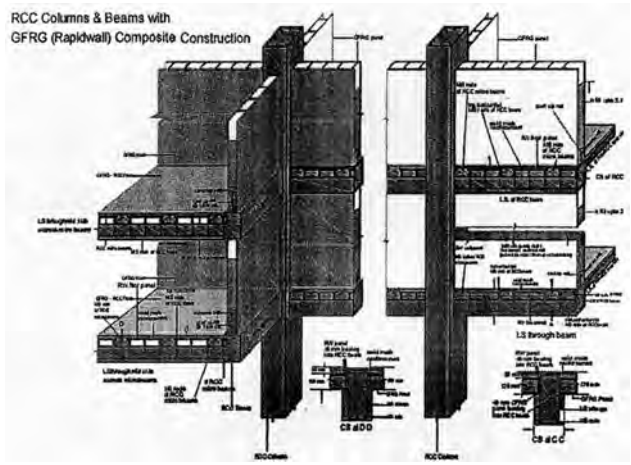


Figure 13: RC columns and beams with GFRG panels as infill walls

Comparative study of 8 storey Hybrid with conventional building showed that dead load reduced by 46.65 %, design base shear in sesmic zone 3 saving 4.23% quantity of concrete in raft foundation saving 25%, raft foundation steel savings 29.41% super structure Rc quantity saving 21.37% super structure steel quantity 17.64% and cement plastering saving 85.26%.

Rapid wall is an Australian technology developed in 1990. IIT Madras conducted extensive research studies, including 2 PhDs on Rapidwall and further 2 more PhDs on Raidwall, supported by Ministry of Science & Technology. Govt of India is going on. This has made it possible to adapt on the method of construction to suit Indian situation and to prepare Rapidwall structural design manual satisfying the provisions of National Building Code including the provisions of earth quake resistance in respective sesmic zones.

Builders / husing industry a take up Rapidwall housing in fast track at affordable cost, with the support of architects, structural engineers, civil / construction engineers who are familiar / got oriented / trained on Rapidwall, design and its construction including water proofing treatment of construction joints. Existing skilled / semi skilled construction workers and technical supervisors with hands on training on few days on handling of panels and its erection of wall panels and laying of panel for slab, using crane, construction crew team can build Rapidwall houses & buildings. This will up grade the skill of local construction man power also.

The structural Design Manual is approved and published by Building Material Technology Promotion Council (BMTPC), Ministry of Housing and Urban Poverty Alleviation, Govt of India, for construction upto 10 floors / storeys. This will be of much use to the professionals like architects, structural engineers, civil / construction engineers, builders and for the reference of urban local bodies of local self Govt of the country for granting building permits.

Water proof treatment of construction joints:

Although waterproofing agents are incorporated in the manufacturing process and water absorption tests conducted on Rapidwall have found that it absorbed less than 2% water after immersing in water for 24 hours, constructing with Rapidwall still requires waterproofing to be carried out to the construction joints both at the time of erection of the panels (refer 5 and 7 above) and as finishing work. And also to enhance abrasion resistance and water repellent quality, Rapidwall requires special primer to impregnate or penetrate into the outer and inner surface of the panel. This will also act as a base primer coat, with excellent bonding properties, prior to applying finishing coat of paint with water or oil based paints, acrylic paints, distemper or cement paints. For details on water proofing of construction joints, terrace, bath/toilet etc please refer to the manual on water proofing of Rapidwall structures.

Rendering / Plastering for fine finish of wall corners / dent/damaged wall surfaces

Rapidwall building does not require cement plastering of its walls and ceiling. After rendering / fine finish with a thin layer of internal walls which require fine finish / corner using Rapid Plaster (gypsum plaster based - manufactured and marketed by RCF & FRBL) OR Birla or JK wall putty of its wall corners etc, a coat of special primer can be applied and painting can be applied. If any finish or rendering of external wall surface or outer side corners, se white cement base JK wall Putty / Birla Wall Putty (as this is water resistant)

Rapid wall also help to save scarce natural resources like sand, water and granite stones apart from cement and steel. Can construct in least time and labour input utilizing the advantages of partial mechanization like use of crane for handling and lifting of panels for erection at sites make Rapidwall construction a affordable cost for both mass housing and up market residences. It is most ideal for repetitive type mass housing from single storey to 10 storeys and save 25-30% cost of construction.

SUDOKU

August Issue - SUDOKU - புதிருக்கான விடை

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September Issue - SUDOKU - புதிர்

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Smart and Nano-Material in Construction Industry

Dr.L.Ramajeyam,Ph.D.,
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Meenakshi Sundararajan Engineering College
Former Principal
P.T.Lee.Chengalvaraya Naicker Polytechnic College

SMART MATERIAL

Smart Materials NASA defines smart materials as «materials that ''remember'' configurations and can conform to them when given a specific stimulus» (http://virtualskies.arc.nasa). Encyclopedia of chemical technology defines that smart materials and structures are those objects that sense environmental events, process that sensory information, and then act on the environment.

Smart materials are relatively new term for materials and products that are able to reversibly change their properties in response to different stimulus. The five fundamental characteristics distinguishing a smart material from the more traditional materials used in architecture are defined as follows:

- Immediacy: they respond in real time
- Transiency: they respond to more than one environmental state
- self -actuation: intelligence is internal to rather than external
- Selectivity: their response is discrete and predictable
- Directness: the response is local to activating event.

All smart materials can be grouped into three types:

1. Property changing materials
2. Energy exchanging material
3. Material exchanging

The first class has a great number of potential applications in architecture while the second class would be applied in building servicing such as actuators and sensors and the third class are acted as insulator.

Application of smart materials according to their place can be neatly classified into the following systems:

Façade, lighting, energy and structural system. Most application of smart materials is in sensors but the most visible and observable application of them in building regards to façade system.

Smart windows and façade materials as components of façade system, are the authorities of an architect that chosen according to the desired application

Smart materials in procedure of architecture design	Smart windows	thermochromic
		Phtochromic
		thermotropic
		electrochromic
		Liquid crystal
		Suspended particle
		Self-cleaning material
	facade Material	Self-cleaning glasses
		Thermochromic cements

Smart materials which are in the process of architecture design Smart Concrete

Smart concrete will heal its own cracks

Concrete is a core building material. But even concrete starts to crumble when it comes face-to-face with water, wind, stress and pressure. The current method of dealing with structural instability in concrete has been to replace or repair it.

But what if all you had to do was add a little water?

A new type of smart concrete contains dormant bacteria spores and calcium lactate in self-contained pods. When these pods come into contact with water they create limestone, filling up the cracks and reinforcing the concrete. Self healing concrete is estimated to save up to 50% of concrete's lifetime cost by eliminating the need for repair. Smart concrete is still being tested to determine how long the bacteria sustains itself, but researchers are hopeful they will be able to officially introduce smart concrete to the construction industry very soon.

Self Healing Coatings

New to the market and already in use are self healing coatings, sealants and adhesives. A recent CNN.com article discussed U.S. based company Autonomic Materials and their development of self healing coatings being used on marine-based structures like ships and oil rigs. The coatings are made with polymers that innately react with one another when they rupture, creating a process of self healing. Autonomic Materials' discovery is only for water-based structures, but the company is looking into developing materials for broader use by the construction industry.

Not yet in use, but in the process of being tested by a group of scientists, is a self healing coating that could be applied to concrete. The journal ACS Applied Materials & Interfaces recently wrote on the scientific discovery of this coating, but points out that it is not yet ready for industrial use. This material has the ability to self heal when it cracks and is exposed to sunlight, allowing UV rays to react with particles in the concrete that expand and then fill the cracks.

Smart and Nano-Materials in Construction Industry

Concrete, steel, glass, and timbers are the most common materials, being used in the field of modern construction.

In the following table, some important characteristics of the above-mentioned materials are tabulated.

Material	Young's Modulus (GPa)	Tensile Strength (GPa)	Density (g/cm3)
Concrete	30	0.007	2.3
Steel	208	1.0	7.8
Glass	50-90	Negligible	2-8
Timber	16	0.008	0.6

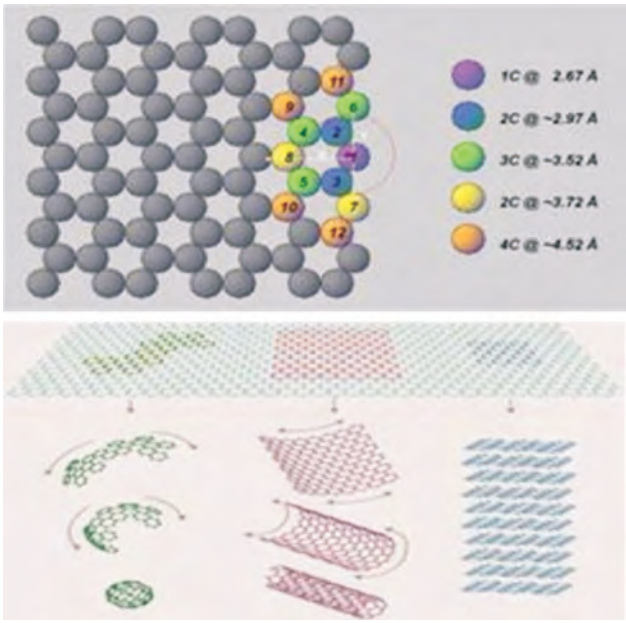
If we compare these properties with those of a carbon nanotube, the results are astonishing. A carbon nanotube has a Young's modulus of 1054 GPa, a tensile strength of 150 GPa and a density of 1.4 g/cm3. Thus a carbon nanotube has strength of 150 times that of steel and at the same time approximately six times more lighter.

Based on the above statistics, it was thought (in UK Delphi Survey 1990), that the Construction industry would benefit the most from Nanotechnology. However, Construction industry lacks behind other industrial sectors in terms of appealing investment from large corporate sectors.

Nano-technology is a technology that enables to develop materials with improved or totally new properties. It is an extension of the sciences and technologies already developed for many years to examine the nature of our world at an ever smaller scale. A nanometer is one billionth of a meter. Nano particles are defined as a particle that has at least one dimension less than 100nm. The size of the particle is very important because at the length scale of the nanometer, i.e. 10-9 m, the properties of the material actually become affected.

Carbon nanotubes and nanofibers present an important classification of nano-materials. They are made from Graphene. Graphene is defined a monolayer of carbon atoms packed into a honeycomb lattice. It can also be defined as an atomic-scale chicken wire made of carbon atoms and their bonds. If graphene layers are arranged as stacked cones, cups or plates, it is known as Carbon nanofibers (CNF) and if the grapheme layers are wrapped into perfect cylinders, they are termed as Carbon nano tubes (CNT).

Nano composites are produced by adding nano-particles to a bulk material in order to improve the bulk material properties. Materials reduced to nano-scale can suddenly show very different properties compared to what they exhibit on a macro scale, enabling unique applications. For instance, opaque cop-



Graphene layer, Carbon Nano Tubes, and Carbon Nano Fibers

per substances become transparent and inert platinium materials attain catalytic properties.

Nano-technology is a dynamic research field that covers a large number of disciplines including construction industry. Concrete is a material most widely used in construction industry. Concrete is a cement composite material made up of Portland cement, sand, crush, water and sometimes admixtures.

Interest in nano-technology concept for Portland-cement composites is steadily growing. The materials such nano-Titania (TiO_2), Carbon nanotubes, nano-silica (SiO_2) and nano-alumina (Al_2O_3) are being combined with Portland cement. There are also a limited number of investigations dealing with the manufacture of nano-cement.

The use of finer particles (higher surface area) has advantages in terms of filling the cement matrix, densifying the structure, resulting in higher strength and faster chemical reactions (e.g. hydration reactions).

Nano-cement particles can accelerate cement hydration due to their high activity. Similarly, the incorporation of nano-particles can fill pores more effectively to enhance the overall strength and durability. Thus nano-particles can lead to the production of a new generation of cement composites with enhanced strength, and durability.

According to researchers, following is a list of areas, where the construction industry could benefit from the nano-technology.

1. Replacement of steel cables by much stronger carbon nanotubes in suspension bridges and cable-stayed bridges
2. Use of nano-silica, to produce dense cement composite materials
3. Incorporation of resistive carbon nanofibers in concrete roads in snowy areas
4. Incorporation of nano-titania, to produce photocatalytic concrete.
5. Use of nano-calcite particles in sealants to protect the structures from aggressive elements of the surrounding environment
6. Use of nano-clays in concrete to enhance its plasticity and flowability.
7. Urban air quality could be improved by if the civil structures are treated with nano TiO_2

Smart materials are materials, materials systems and products which, in contrast to conventional materials, are dynamic in nature. At its simplest, smart materials respond to and interact with their immediate environments to exhibit adaptive characteristics that fulfill previously impossible functions. Smart materials make the products, services, and not least, public and private spaces of tomorrow's world possible.

Today it is possible to specially create materials for a specific purpose. The smart materials successes made in the material sciences sector often go unheralded in the background as the market-ready product basks in the plaudits. Yet, the technological foundation or competitive advantage of the product developed would not exist were it not for smart materials. Around 70 percent of all technological innovations have a direct or indirect dependence on characteristics and functionality of applied materials.

However, 'sensual structures' need not be restricted to hi-tech applications such as aircraft. They could be used in the monitoring of civil engineering structures to assess durability. Monitoring of the current and long term behaviour of a bridge would lead to enhanced safety during its life since it would provide early warning of structural problems at a stage where minor repairs would enhance durability, and when used in conjunction with structural rehabilitation could be used to safety monitor the structure beyond its original design life. This would influence the life costs of such structures by reducing upfront construction costs (since smart structures would allow reduced safety factors in initial design), and by extending the safe life of the structure.

01.09.2015: சிறப்பு செயற்குழு பொதுக்குழு கூட்டம்

சிறப்பு செயற்குழு மற்றும் பொதுக்குழுக் கூட்டம் காஸ்மோ பாலிதன் கிளப், நந்தனம் சென்னை -35ல் நடைபெற்றது. இக்கூட்டத்தில் மாநில அளவிலானக் கூட்டம் மற்றும் மாநாடு நடத்துவது பற்றி கலந்தாலோசிக்கப்பட்டது. இதில் மூத்த தலைவர்கள், அலுவலக நிர்வாகிகள், செயற்குழு / பொதுக்குழு மற்றும் மேலாண்மைக்குழு உறுப்பினர்கள் உட்பட 54 பேர் கலந்து கொண்டனர்.

02.09.2015: Meeting at Service Tax Office

Service Tax சம்மந்தப்பட்ட பல்வேறு இடர்பாடுகளை களையும் பொருட்டு AN OPEN FORUM ஒன்றை Service tax Commissioner சார்பாக Newry Tower, Anna Nagar, Chennai 40-ல் ஏற்பாடு செய்யப்பட்டு அதில் கலந்து கொள்ள தென்னக மய்யத்திற்கு அழைப்பு அனுப்பப்பட்டது. தென்னக மய்யம் சார்பாக கவுரவ செயலாளர்
திரு. K. வெங்கடேசன் மற்றும் பொதுக்குழு உறுப்பினர் திரு. M.A. ஜேசுராஜராஜன் ஆகியோர் கலந்து கொண்டு தங்கள் கருத்துக்களை பதிவு செய்தனர். கவுரவ செயலாளர்
திரு. K. வெங்கடேசன் அவர்கள் Service Tax Commissioner திரு. G. இரவிந்திரநாத் அவர்களை நேரில் சந்தித்து கட்டுனர்களுக்காக Service Tax சம்மந்தமாக விழிப்புணர்ச்சி ஏற்படுத்த தென்னக மய்யம் சார்பாக ஏற்பாடு செய்யப்படவுள்ள கருத்தரங்கில் கலந்து கொள்ள வேண்டுகோள் விடுத்தார். அதற்கு அவரும் சம்மதம் தெரிவித்தார்.

07.09.2015: Concrete Date celebrations

ICI (Indian Concrete Institute) மற்றும் Ultra Tech Cement Ltd இணைந்து Concrete day Celebration ஓட்டல் கிரீன் பார்க், சென்னையில் ஏற்பாடு செய்திருந்தனர். Er. S.N. Manohar, Former Chief Engieneer and Head ஒ R&D Tata consulting Engineers அவர்கள் 3rd Dr. A. Ramakrishna Memorial Lecture on Designs and Construction of Eqrthquake Resistant Buildings என்ற பொருள் மீது உரை நிகழ்த்தினார். மேலும் ICI (CC) மற்றும் Ultra Tech Awards -2015 பல்வேறு பிரிவுகளில் சாதித்த பொறியாளர்களுக்கு வழங்கப்பட்டு கவுரவிக்கப்பட்டனர். இந்த விழாவில் தென்னக மய்யம் சார்பாக கவுரவ செயலாளர்
திரு. K. வெங்கடேசன், முன்னாள் காப்பாளர் டாக்டர். D. துக்காராம், முன்னாள் மாநிலத்தலைவர் திரு. Mu. மோகன், முன்னாள் மய்யத்தலைவர் திரு. R. சிவக்குமார், மேலாண்மைக்குழு உறுப்பினர் திரு. S. கணபதி, பொதுக்குழு உறுப்பினர் திரு. P.S. ரவிபிரசாத் ஆகியோர் கலந்து கொண்டனர்.

08.09.2015: Service Tax Commissioner-உடன் சந்திப்பு

மய்யத்தலைவர் திரு.O.K. செல்வராஜ், கவுரவ செயலாளர் திரு. K. வெங்கடேசன், முன்னாள் மய்யத்தலைவர் திரு. R. சிவக்குமார், Taxation Committee Chairman திரு. S.D. கண்ணன் ஆகியோர் Commissioner of Service Tax, திரு. G. ரவீந்திரநாத் அவர்கள் அண்ணாநகர் சென்னையில் உள்ள அவரது அலுவலகத்தில் சந்தித்தனர். அப்போது தென்னக மய்யம் சார்பாக இந்த மாத இறுதியில் BAI தென்னக மய்ய உறுப்பினர்களுக்கு உள்ள Service Tax சம்மந்தப்பட்ட இடர்பாடுகளை போக்கவும் மற்றும் விழிப்புணர்ச்சி ஏற்படுத்தவும் கூட்டம் ஒன்று ஏற்பாடு செய்ய உள்ளதால் அதில் கலந்து கொள்ளும்படி வேண்டுகோள் விடுத்தனர். அதற்கு அவர் சம்மதம் தெரிவித்து 29,09,2015 அன்று கூட்டம் நடத்த முடிவு செய்யப்பட்டது.

10.09.2015: கலந்தாய்வுக்கூட்டம்

அகில இந்திய மேலாண்மை மற்றும் பொதுக்குழுக் கூட்டம் 12.09.2015 அன்று மும்பையில் நடைபெற உள்ளதையொட்டி கலந்தாய்வுக் கூட்டம் நமது மய்ய அலுவலகத்தில் மாலை 4 மணி அளவில் நடைபெற்றது. அதில் அகில இந்திய முன்னாள் தலைவர் திரு. R. இராதாகிருட்டிணன், மய்யத்தலைவர் திரு. O.K. செல்வராஜ், கவுரவ செயலாளர் திரு. K. வெங்கடேசன், கவுரவ பொருளாளர் திரு. K. அண்ணாமலை, இணைச் செயலாளர் திரு. S. இராமப்பிரபு, முன்னாள் மாநிலத்தலைவர் திரு. Mu. மோகன், முன்னாள் மய்யத்தலைவர்கள் திரு. S. அய்யநாதன், திரு. R. சிவக்குமார், மேலாண்மைக் குழு உறுப்பினர் திரு. S. கணபதி, பொதுக்குழு உறுப்பினர் திரு. L. சாந்தக்குமார் ஆகியோர் கலந்து கொண்டனர்.

12.09.2015: அகில இந்திய மேலாண்மை மற்றும் பொதுக்குழு கூட்டம்

அகில இந்திய மூன்றாவது மேலாண்மைக்குழுக் கூட்டம் மற்றும் இரண்டாவது பொதுக்குழு கூட்டம் The Lalit Plaza, Hotel The Lalit, Mumbai -ல் நடைபெற்றது. இக்கூட்டம் மும்பை மய்யத்தால் Host செய்யப்பட்டது. இக்கூட்டத்தில் தென்னக மய்யத்திற்கு "Over All Best Centre - BAI " (Above 200 members) விருது தென்னக மய்யத்திற்கு தொடர்ந்து 6வது முறையாகவும், முதன் முறையாக Best Publication by a Centre விருது நமது சதர்ன் பில்டர் மாத இதழுக்காக அறிவிக்கப்பட்டது என்பதை மிகவும் மகிழ்ச்சியுடன் தெரிவித்துக்கொள்கிறோம். Over All Best Cetnre - BAI Award தென்னக மய்யம் பெறுவதற்கு ஆதரவு அளித்த மூத்த தலைவர்கள், அலுவலக நிர்வாகிகள், செயற்குழு / பொதுக்குழு மற்றும் மேலாண்மைக்குழு உறுப்பினர்கள் அனைவருக்கும் மனமார்ந்த நன்றியையும் பாராட்டுதலையும் தெரிவித்துக்கொள்கிறோம். மேலும் முதன் முறையாக Best Publication Award by a Centre விருது நமது சதர்ன் பில்டர் மாத இதழுக்கு கிடைத்ததற்கு கட்டுரைகள், விளம்பரங்கள் அளித்து உதவிய உறுப்பினர்களுக்கும், அதன் ஆசிரியர் திரு. Mu. மோகன், அவர்களுடைய அயராத உழைப்பிற்கும் மனமார்ந்த நன்றியையும் பாராட்டுதலையும் தெரிவித்துக்கொள்கிறோம்.

29.09.2015 Service Tax Meeting

தென்னக மய்யம் சார்பாக 29.09.2015 அன்று Service Tax பற்றிய கூட்டம் சென்னை ஓட்டல் சவேராவில் காலை 10 மணி முதல் பிற்பகல் 1 மணி வரை ஏற்பாடு செய்யப்பட்டது. முதன்மை விருந்தினராக கலந்து கொண்ட Commissioner, Service Tax திரு. G. ரவீந்திரநாத் அவர்களை அகில இந்திய முன்னாள் தலைவர் திரு. M. கார்த்திகேயன் அவர்கள் பூங்கொத்து அளித்து வரவேற்றார். முதன்மை விருந்தினராக கலந்து கொண்டு Commissioner, Service Tax திரு. ரவீந்திரநாத் உறுப்பினர்கள் கேட்ட சந்தேகங்களுக்கு மிகவும் பொறுமையுடன் விவரமாக பதலளித்தார். அது உறுப்பினர்களுக்கு மிகவும் பயனுள்ளளதாக இருந்தது. திருமதி நளினா சோபியா Asst. Commissioner அவர்கள் கட்டுமானத் தொழில் சம்மந்தப்பட்ட சேவை வரி வவரங்களை Power Point மூலமாக மிகவும் விளக்கமாக எடுத்துரைத்தார். திரு. O.K. செல்வராஜ் அவர்கள் திரு. G. ரவீந்திரநாத், Commissioner அவர்களுக்கு நினைவுப் பரிசு வழங்கி கவுரவித்தார். கவுரவ செயலாளர் திரு. K. வெங்கடேசன் அவர்கள் Service Tax கூட்டத்தில் கலந்து கொண்டு சிறப்பித்த திரு. G. ரவீந்திரநாத் - Commissioner of Service Tax மற்றும் அவரது அதிகாரிகள் கொண்ட குழுவிற்கு நன்றியைத் தெரிவித்துக்கொண்டார்.

FORM

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Thanking you and assuring of our best services.

Yours faithfully,

T.V. CHANDRASEKAR
Diary Committee Chairman,
Mob: 94440 03311

To

Diary Committee Chairman
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From

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Total …… Rs……..

We enclose herewith a Cheque/Demand draft of Rs……towards the ADVANCE Payment for our order in favour of "BUILDERS ASSOCIATION OF INDIA"

Thanking you,
yours faithfully,

(Signature)
Cheque/Demand Draft

27.08.2015 அன்று நடைபெற்ற நமது செயற்குழு உறுப்பினர்
திரு. R. பார்த்திபன் அவர்களின் இல்லத்திருமண விழா.

24.09.2015 அன்று நடைபெற்ற நமது பொதுக்குழு உறுப்பினர்
திரு. M. ஜெய்சங்கர் அவர்களின் இல்லத் திருமண விழா

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