



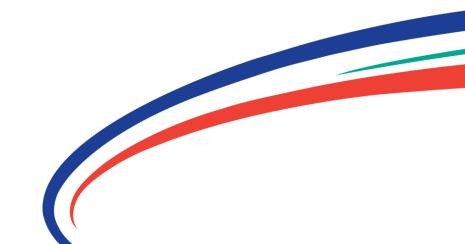
# KLANG VALLEY MASS RAPID TRANSIT -SG. BULOH – KAJANG LINE

Mr. Haris Fadzilah Hassan Director

**10 December 2013** 



## THE KVMRT PROJECT



#### **ETP TO DRIVE MALAYSIA TOWARDS 2020**





The Economic Transformation Programme (**ETP**) is a comprehensive effort that will transform Malaysia into a high-income nation by 2020

#### 12 National Key Economic Areas (NKEAs)





#### **GREATER KUALA LUMPUR/ KLANG VALLEY**



#### The 20:20 Target

- The Greater Kuala Lumpur and Klang Valley initiatives are aimed at transforming GKL/KV into the world's top 20 most livable metropolis by 2020.
- Greater KL/KV comprises the area under the administration of 10 local authorities.
- The various Greater KL/KV initiatives are targeted to contribute RM190 billion in Gross National Income (**GNI**) over the course of the next 10 years and creating over 300,000 jobs.

#### **KLANG VALLEY MRT PROJECT (KVMRT PROJECT)**



- The Klang Valley Mass Rapid Transit project is one of the Entry Point Projects (EPP)
  under the Greater Kuala Lumpur National Key Economic Area (NKEA).
- The KVMRT Project was approved by the Government of Malaysia in December 2010 and officially launched on 8 July 2011 by the Prime Minister of Malaysia,
   YAB Dato' Sri Mohd Najib Bin Tun Abdul Razak.
- KVMRT is a proposed 3 line Mass Rapid Transit system in Klang Valley/ Kuala Lumpur.





#### NEW MRT LINES FOR GKL/KV AS PROPOSED IN THE ETP



	es 3 new MRT lines of lius of 20 km from the	
Sg. Buloh	Gombak	
\\\\\\\		
Putra Heights	Seri Kembangan	Kajang

Lines	Red	Green	Circle	Total
Corridor	NW - SE	NW-SE	City Center Orbital	
Length (km)	52	50	39	141
Elevated     Tunneled	44 8	39 11	20 19	103 38
2020 ridership (passengers/day)	415,000	435,000	320,000	1,170,000

catchment	1,214,300	1,039,300	1,136,200	Ľ
Interchange sta	tions			
Existing	8			
Now	22			

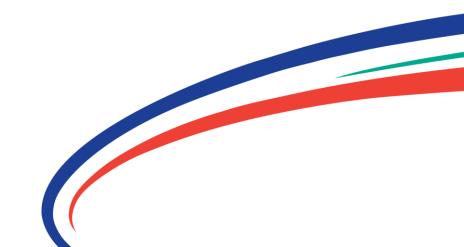
- 3 MRT lines for GKL/KV under the ETP have been proposed including the extension of LRT and Monorail lines.
- The first MRT line to be implemented is the 51km Sungai Buloh-Kajang Line (SBK Line).

Total

 Feasibility studies for the other 2 lines have been completed by SPAD. Implementation of new lines pending Government approval.

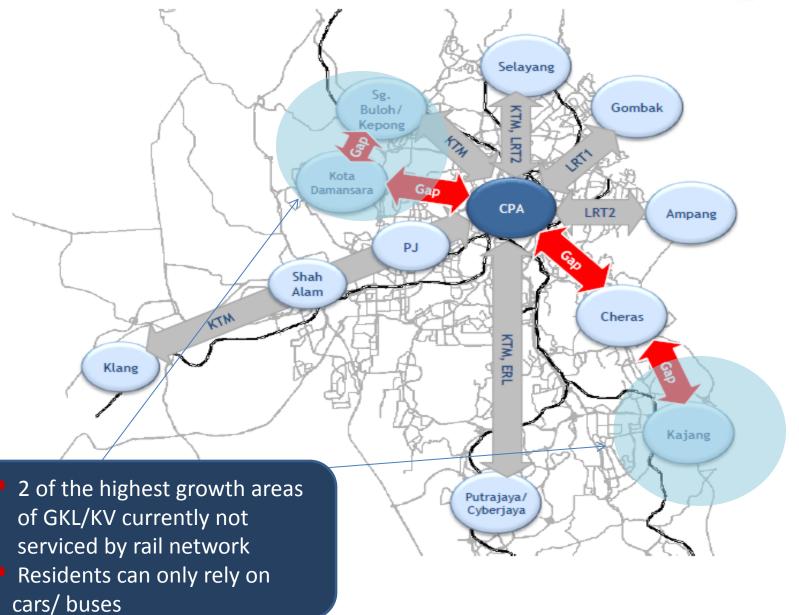


## **SBK LINE**



#### **CURRENT GKL/KV'S CRITICAL CORRIDOR GAP**





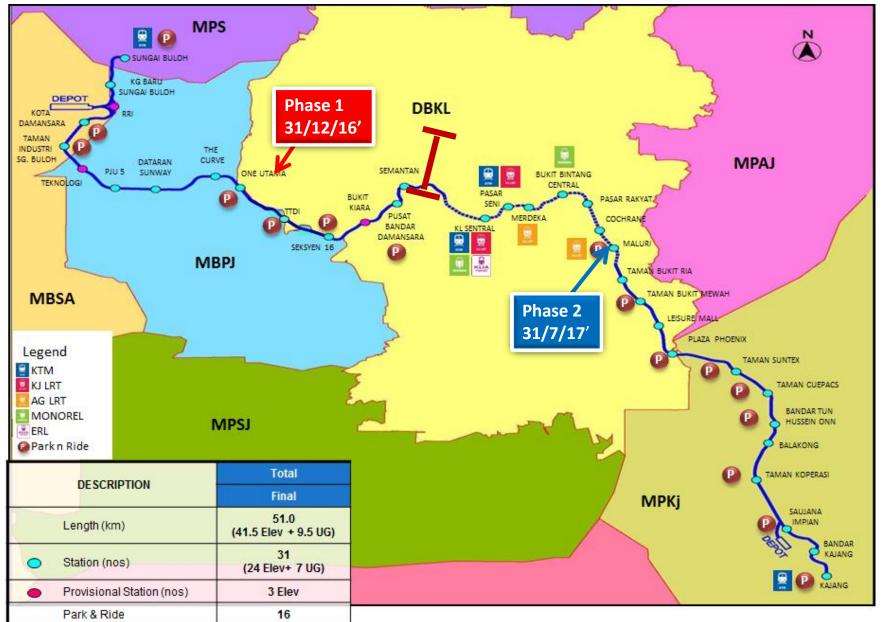
#### THE SBK LINE ALIGNMENT





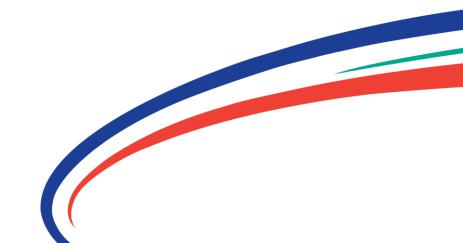
#### **SBK LINE - PHASED OPENING**







## MRT CORP.



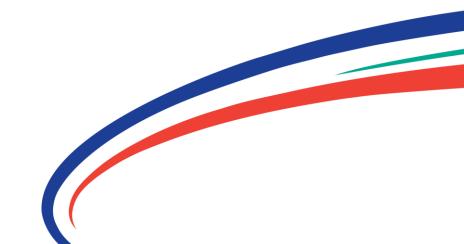
## MASS RAPID TRANSIT CORPORATION SDN BHD (MRT CORP.)



- Wholly owned by the Government of Malaysia via Ministry of Finance, Inc.
- MRT Corp. is the *developer* and *owner* of the Klang Valley MRT Project and assets.
- Took over KVMRT Project from Prasarana on 1 October 2011.



## **KVMRT'S OBJECTIVES**



#### **KVMRT'S OBJECTIVES**



- To construct a new diagonal line to meet the increasing demand for rail based urban public transportation.
- To increase the *interconnectivity* of destinations and provide better *integration* between new SBK Line and existing KTM, LRT and MONOREL lines.
- To increase the railway network coverage and its capacity to provide more train services, hence carry more passengers.
- To alleviate road traffic congestion problems through a comprehensive, inter connectible, reliable and safe MRT services.
- To get the urban public to switch their mode of transportation from private vehicles to public transportation.
- To contribute to a cleaner environment and uplift the living standards for Klang Valley inhabitants.

#### MRT: CATALYST FOR BETTER INTEGRATION











bdullah Hukum

Bangsar

KU15 KL Sentral

KU15 KL Pasar Seni

KU14 Pasar Seni

KU13 Masjid Jamek

KU13 Masjid Jamek

KU13 Masjid Dang Wangi



**IMPROVED INTERCHANGE POINTS** 

**SEAMLESS TRAVEL THROUGH AFC** 













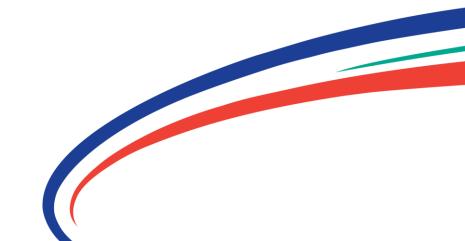
**RAIL CONNECTIVITY** 

**FEEDER SERVICES** 

**COVERED WALKWAYS** 

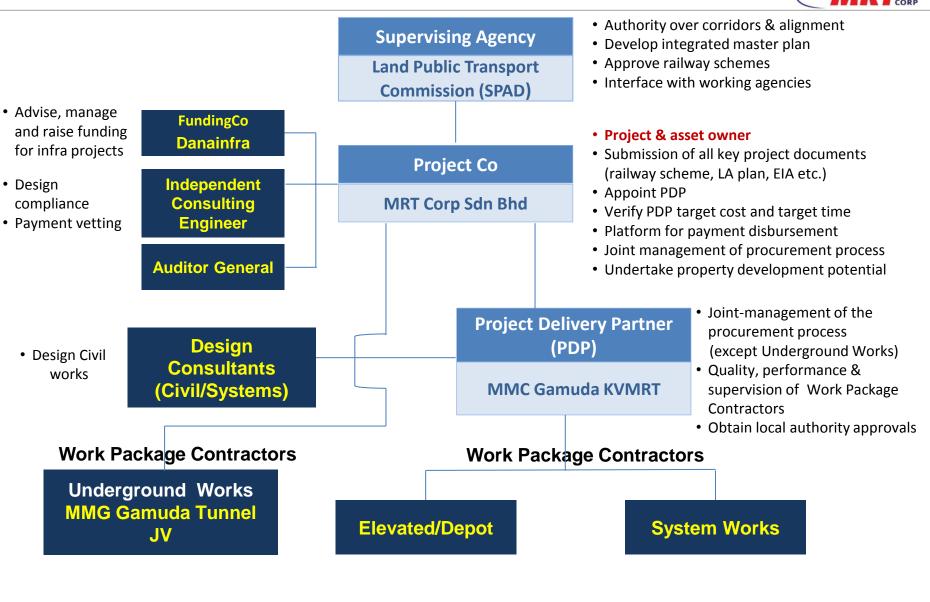


## PROJECT STRUCTURE & GOVERNANCE



#### PROJECT STRUCTURE





#### PROJECT GOVERNANCE

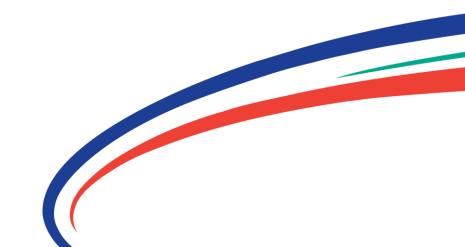




- Overall policies and direction
- Strategic issues resolution
- Big decisions
- Progress reporting
- Meeting frequency: Quarterly
- Complex inter-agency issues resolution
- Medium-high impact decisions
- Progress reporting
- Meeting frequency: Monthly
- Progress monitoring and tracking
- Operational and technical decisions
- Project issues resolution
- Meeting frequency: Weekly



## **PROCUREMENT**



#### PROCUREMENT STRUCTURE



**MOF** 

One Stop Procurement Committee

Chair: Prime Minister/
Finance Minister II /
Secretary-General to
the Treasury

- Award of Work Package Contracts
- Chairperson depending on value of award
- Approval of Procurement Strategy

MRT Corp.

One Stop Technical
Committee

Chair: CEO, MRT Corp.

Recommend award of WPC contracts to OSPC

Procurement Strategy, Process & Evaluation Criteria

All matters related to Procurement.

MRT Corp. & PDP

**Working Committee** 

**Chair: MRT Corp & PDP** 

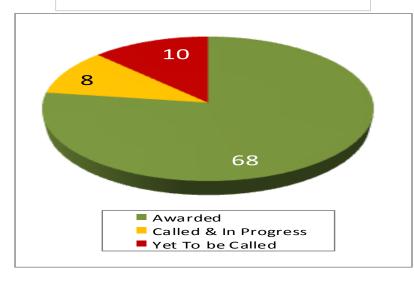
- Evaluation of tenders
- Recommendation to OSTC
- Clarification to tenderers

#### **MAIN WORKS TENDER STATUS AS AT 6 DECEMBER 2013**

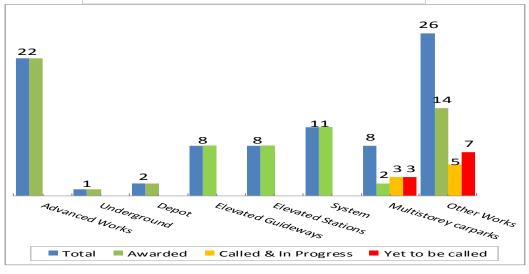


Description	No.
Total No. of Packages	86
No. of awarded packages	68
No. of packages called & In progress	8
No. of packages yet to be called	10

#### Status of no. work packages



#### Status of contracts awarded



## VALUE OF CONTRACTS AWARDED AS AT 6 DECEMBER 2013 MRT.



No	Category	Value (RM)
1	Advance works	0.17 billion
2	Main works	
	Guideways and Stations	7.39 billion
	Depot	0.65 billion
	Underground works	8.28 billion
	Multistorey Carparks	0.18 billion
	Systems	4.01 billion
3	TOTAL	20.68 billion

CIVIL/ ELEVATED (MALAYSIAN CONTRACTORS) (1/3)

Code	Work Packages	Contractor
MAIN W	ORKS CIVIL	
DPT1	Construction and Completion of Sg Buloh Maintenance Depot, Administration Building, External Works and other associated Works.	Trans Resources Corporation Sdn Bhd
DPT 2	Construction and Completion of Kajang Maintenance Depot, Administration Building, External Works and other associated Works.	TSR Bina Sdn Bhd
V1	Construction and completion of Viaduct Guideway and other associated works from Sg Buloh to Kota Damansara	Syarikat Muhibah & Perniagaan & Pembinaan Sdn Bhd
V2	Construction and completion of viaduct guideway and other associated works from Kota Damansara to Dataran Sunway Station	Gadang Engineering (M) Sdn Bhd
V3	Construction and completion of viaduct guideway and other associated works from Dataran Sunway to Section 17	Mudajaya Corporation Berhad
V4	Construction and completion of Viaduct Guideway and other associated works from Section 17 to Semantan Portal	Sunway Construction Sdn Bhd
V5	Construction and completion of Viaduct Guideway and other associated works from Maluri Portal to Plaza Phoenix Station	IJM Construction Sdn Bhd
V6	Construction and completion of Viaduct Guideway and other associated works from Plaza Phoenix station to Bandar Tun Hussien Onn station.	Ahmad Zaki Sdn Bhd

CIVIL/ ELEVATED (MALAYSIAN CONTRACTORS) (2/3)

Code	Work Packages	Contractor
MAIN WO	ORKS CIVIL	
V7	Construction and completion of Viaduct Guideway and other associated works from Bandar Tun Hussien Onn to Taman Mesra	MTD Construction Sdn Bhd
V8	Construction and completion of viaduct guideway and other associated works from Taman Mesra to Kajang Station	UEM Construction Sdn Bhd
SBG-N	The supply and delivery of Segmental Box Girders (Package V1-V4)	SPC Industries Sdn Bhd (SPC)
SBG-S	The supply and delivery of Segmental Box Girders (Package V5-V8)	Eastern Pretech (M) Sdn Bhd (EPM)
MSPR 1	Construction and Completion of Multi Storey Car Park Building, External Works and Other Associated Works at Sg Buloh Station	TSR Bina Sdn Bhd (TSR)
MSPR 9	Construction And Completion Of Multi Storey Car Park Building External Works And Other Associated Works At Kajang Station	SMPP-Ibwani JV.
S1	Elevated Stations S1: Sg Buloh- Kota Damansara	Trans Resources Corporation Sdn Bhd
S2	Elevated Stations S2: Kota Damansara to Dataran Sunway	Naim Engineering Sdn Bhd
S3	Elevated Stations S3 – Dataran Sunway to Section 17	UEM Construction Sdn Bhd

CIVIL/ ELEVATED (MALAYSIAN CONTRACTORS) (3/3)

MRT.

Code	Work Packages	Contractor
MAIN CI	VIL WORKS	
S4	Elevated Stations S4 – Section 16- PBD & Semantan	Naim Engineering Sdn Bhd
<b>S</b> 5	Elevated Stations S5: Taman Bukit Ria, Taman Bukit Mewah, Leisure Mall & Plaza Phoenix	IJM Construction Sdn Bhd
<b>S</b> 6	Elevated Stations S6: Taman Suntex, Taman Cuepacs and Bandar Tun Hussien Onn.	Ahmad Zaki Sdn Bhd
S7	Elevated Stations S7: Balakong to Taman Koperasi	Apex Communication Sdn Bhd
S8	Elevated Stations S8: Taman Mesra to Kajang Station	Apex Communication Sdn Bhd

### CIVIL/ UNDERGROUND (OPEN TO FOREIGN CONTRACTORS) MRT.

Code	Work Packages	Contractor
MAIN CI	VIL WORKS	
UG	Underground Works Package (Tunnel Stations and Associated Structures) between Semantan North Portal and Maluri South Portal	MMC Gamuda KVMRT (T) Sdn Bhd

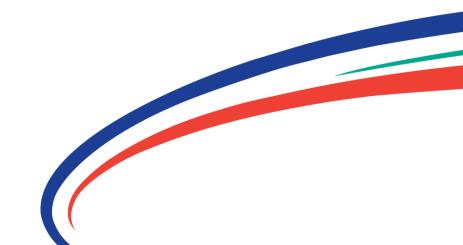
#### **SYSTEMS CONTRACTS (OPEN TO FOREIGN CONTRACTORS)**

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Code	Work Packages	Contractor	MRTCORP

Code	Work Packages	Contractor
MAIN WO	ORKS SYSTEMS	
SBK-S-01	Engineering, Procurement, Construction, Testing And Commissioning Of Electric trains	Siemens Malaysia Sdn Bhd
SBK-S-02	Engineering, Procurement, Construction, Testing And Commissioning Of Depot Equipments & maintenance vehicles	Siemens Malaysia Sdn Bhd
SBK-S-03	Engineering, Procurement, Construction, Testing And Commissioning of Signalling and train control system (phase 1 & 2)	Bombardier (M) Sdn Bhd
SBK-S-05	Engineering, Procurement, Construction, Testing And Commissioning Of Power supply & distribution system (phase 1 & 2)	Meidensha Corporation
SBK-S-06	Engineering, Procurement, Construction, Testing And Commissioning Of Trackworks	Mitsubishi Heavy Industries Ltd
SBK-S-07	Engineering, Procurement, Construction, Testing And Commissioning Of Telecommunication System"	Apex Communication Sdn Bhd – KG CNS Consortium
SBK-S-08	Engineering, Procurement, Construction, Testing And Commissioning Of Facility SCADA	AFS Engineering (M) Sdn Bhd- ST Electronics Limited
SBK-S-09	Commission of Automotic Fore Collection Contains	Affliated Computer Services Solutions France
SBK-S-10	Engineering, Procurement, Construction, Testing And Commissioning Of Electronic Access Control	Apex Communication Sdn Bhd – Johnson Controls (M) Sdn Bhd Consortium
SBK-S-11	Engineering, Procurement, Construction, Testing And Commissioning Of Building Management System	Metronic Engineering Sdn Bhd



## **PROJECT MILESTONES**



#### **MASTER IMPLEMENTATION PROGRAMME**



	TASKS / ACTIVITIES	2011					2012				2013				2014				2015				20	16		2017			
		Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4																				
1	PHASE 1 – NORTHERN ELEVATED SB-SEMANTAN																								PHAS	SF 1			
а	Civil & Structure Works				-	Q la	n 20	12					!							1 Se	p 20	15			J	l			
b	Systems, T&C, & trial running					o Ja	11 20	12																					
2	PHASE 2 – UNDERGROUND AND SOUTHERN ELEVATED											2	Jan	201	4										31 D	ec 2	2016		
а	Civil & Structure Works — Southern Elevated						20 F	eb 20	012												31 C	ec 20	015						
b	Civil & Structure Works – Underground						30 [	Mar 2	2012				1	30	Aug	2014	4					30	) Jur	201	16		F Com	inal plet	
	Systems, T&C & trial running												i	30	rug	201												<b>Y</b>	
																										31	Jul	201	7



#### **PROGRESS AS AT 31 OCTOBER 2013**



#### KVMRT SBK LINE PROJECT IS **ON PROGRAMME**.

Overall (Elevated and Underground): 30.17%

Elevated: 21.03%

Underground: 43.91%

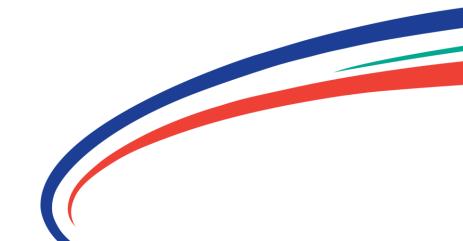
#### **KEY ACHIEVEMENTS OCTOBER 2013**



- 80% of Tender Packages awarded.
- All 10 TBMs are now in Malaysia, with 7 No. on site and 5 No. actually tunneling.
- Production rates from tunneling good with tunneling now 18% complete overall.
- Excavation for 7 stations in progress. With diaphragm walling still in progress at Pasar Seni and Bukit Bintang stations. Overall excavation status is 41% complete.
- Overall 70% elevated guideway piling completed.
- 8 out of 18 SBG Launch Gantrys on site, with 20 spans of SBG launched.



## **OFFSET PROGRAMMES**



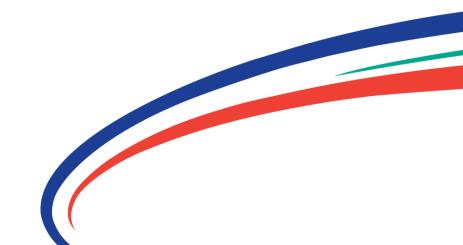
#### OFFSET PROGRAMMES (SYSTEMS CONTRACTS)



- The Malaysian Government approved a Policy and Guideline on Offset Programmes in Government Acquisitions in January 2011.
- The purpose of the Offset Programmes is to ensure that national procurement programmes support Malaysia's development objectives through acquisitions of technology, industrial participation and market access.
- The Malaysian Industry-Government Group for High Technology ("MIGHT")
  manages offset activities associated with high value and strategic government
  acquisitions worth more than RM50 million.
- For the MRT project, MIGHT is specifically looking at Maintenance Repair and Overhaul (MRO), human capacity development, system integration and engineering capability development for the nation's benefits.
- The Offset Programme shall be implemented through an agreement mutually agreed between the systems contractor and MRT Corp.



## **BUMIPUTERA PARTICIPATION**



#### **BUMIPUTERA PARTICIPATION**

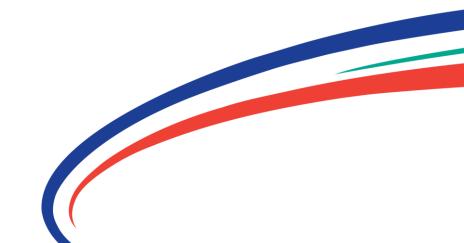


- The works package contractor shall ensure the participation of Bumiputera organisations or professionals to carry out specific portion of the works:
  - a. On sub-contract basis; or
  - b. As joint venture partner

and the amount of the participation shall be at least 30% of the contract sum.



## **NEW MRT LINES**



#### **MRT LINE 2 & LINE 3**



- Proposed North-South Line and Circle Line.
- SPAD has completed feasibility studies and preliminary alignments for both Lines.
- Pending Cabinet approval to proceed with implementation of Lines.



## **THANK YOU**

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