

**Prepared by:**  
Logan Grimm  
EXCEL TRUCK GROUP  
267 LEE HIGHWAY SOUTH  
ROANOKE, VA 24019  
Phone: 540-453-1004

*A proposal for*

*Prepared by*  
**EXCEL TRUCK GROUP**  
*Logan Grimm*

*Jul 14, 2021*

**Western Star 49X**

Components shown may not reflect all spec'd options and are not to scale

## S P E C I F I C A T I O N   P R O P O S A L

Description	Weight Front	Weight Rear
<b>Price Level</b>		
WST 49X STAR PRL-26X (EFF:7/26/21)		
<b>Data Version</b>		
SPECPRO21 DATA RELEASE VER 006		
<b>Vehicle Configuration</b>		
WESTERN STAR 49X	9,175	6,500
2023 MODEL YEAR SPECIFIED		
SET BACK AXLE - TRUCK		
STRAIGHT TRUCK PROVISION, NON-TOWING		
LH PRIMARY STEERING LOCATION		
<b>General Service</b>		
TRUCK CONFIGURATION		
DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)		
CONSTRUCTION SERVICE		
CONSTRUCTION BUSINESS SEGMENT		
HEAVY EQUIPMENT COMMODITY		
TERRAIN/DUTY: 100% (ALL) OF THE TIME, IN TRANSIT, IS SPENT ON PAVED ROADS		
MAXIMUM 8% EXPECTED GRADE		
SMOOTH CONCRETE OR ASPHALT PAVEMENT - MOST SEVERE IN-TRANSIT (BETWEEN SITES)		
ROAD SURFACE		
WESTERN STAR VOCATIONAL WARRANTY		
EXPECTED FRONT AXLE(S) LOAD : 12000.0 lbs		
EXPECTED REAR DRIVE AXLE(S) LOAD : 21000.0 lbs		
EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 33000.0 lbs		
<b>Truck Service</b>		
FLATBED/PLATFORM/STAKE BODY		
GODWIN MANUFACTURING COMPANY		

Description	Weight Front	Weight Rear
<b>Engine</b>		
CUM X12 350 HP @ 1800 RPM, 1350 LB-FT @ 1000 RPM, 1800 GOV RPM	-670	-55
<b>Electronic Parameters</b>		
65 MPH ROAD SPEED LIMIT		
NO IDLE SHUTDOWN CONFIGURATION		
<b>Engine Equipment</b>		
2016 ONBOARD DIAGNOSTICS/2010 EPA/CARB/GHG21 CONFIGURATION		
2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)		
STANDARD OIL PAN		
ENGINE MOUNTED OIL CHECK AND FILL		
SIDE OF HOOD AIR INTAKE WITH ENGINE MOUNTED AIR CLEANER		
LN 12V 170 AMP AVI 160 PAD MOUNT ALTERNATOR		
(3) DTNA GENUINE, HIGH TEMP AGM STARTING AND CYCLING, MIN 2775CCA, 570RC, THREADED STUD BATTERIES		
PASSENGER SEAT BATTERY BOX VENTED TO OUTSIDE OF CAB		
BATTERY BOX MOUNTED UNDER PASSENGER SEAT		
WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN		
PLASTIC BATTERY BOX COVER		
CUMMINS NATURALLY ASPIRATED 25.9 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE		
ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM		
CUMMINS INTEBRAKE BRAKE WITH HIGH MED LOW BRAKE		
RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH B-PILLAR MOUNTED VERTICAL TAILPIPE		
ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD ACTIVE REGENERATION AND VIRTUAL REGENERATION REQUEST SWITCH IN CLUSTER AND DASH MOUNTED INHIBIT SWITCH		

Description	Weight Front	Weight Rear
11 FOOT 06 INCH (138 INCH+0/-5.9 INCH) EXHAUST SYSTEM HEIGHT		
RH CURVED VERTICAL TAILPIPE B-PILLAR MOUNTED ROUTED FROM STEP		
13 GALLON DIESEL EXHAUST FLUID TANK	9	3
UNPOLISHED ALUMINUM WST DIESEL EXHAUST FLUID TANK COVER		
LH HEAVY DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION		
STANDARD DIESEL EXHAUST FLUID TANK CAP		
STAINLESS STEEL AFTERTREATMENT DEVICE/MUFFLER/TAILOPIPE SHIELD		
AIR POWERED ON/OFF ENGINE FAN CLUTCH		
AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON ENGINE MOUNTED		
ALLIANCE FUEL FILTER/WATER SEPARATOR WITH INDICATOR LIGHT	15	
CUMMINS SPIN ON FUEL FILTER		
FULL FLOW OIL FILTER		
1400 SQUARE INCH VOCATIONAL RADIATOR		
ANTIFREEZE TO -34F, OAT (NITRITE AND SILICATE FREE) EXTENDED LIFE COOLANT		
GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT		
RADIATOR DRAIN VALVE		
LOWER RADIATOR GUARD		
DELCO 12V 39MT HD/OCP STARTER WITH THERMAL PROTECTION AND INTEGRATED MAGNETIC SWITCH		

#### Transmission

EATON FULLER FR-14210B TRANSMISSION	-30	-10
-------------------------------------	-----	-----

#### Transmission Equipment

NO TCU - AMT SHIFT CALIBRATION  
 EATON ADVANTAGE 15-1/2 INCH SELF  
 ADJUSTING CLUTCH  
 TORQUE LIMITING CLUTCH BRAKE  
 ZERK FITTING WITH EXTENSION HOSE AT  
 CLUTCH RELEASE BEARING  
 HYDRAULIC CLUTCH CONTROL  
 ALUMINUM CLUTCH HOUSING  
 NO PTO MOUNTING LOCATION SPECIFIED

Description	Weight Front	Weight Rear
MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN		
PAINTED SHIFT LEVER, SOLID LINKAGE		
AIR TO OIL TRANSMISSION COOLER		
SYNTHETIC TRANSMISSION LUBE		
<b>Front Axle and Equipment</b>		
DETROIT DA-F-12.0-3 12,000# FF1 71.5 KPI/3.74 DROP SINGLE FRONT AXLE		
CONMET PRESET PLUS PREMIUM ALUMINUM FRONT HUBS		
MERITOR EX-L OPTIMIZED AXIAL AIR DISC FRONT BRAKES		
NON-ASBESTOS FRONT BRAKE LINING		
FRONT DISC BRAKE ROTORS		
FRONT BRAKE DUST SHIELDS		
FRONT OIL SEALS		
VENTED FRONT HUB CAPS WITH WINDOW, CENTER AND SIDE PLUGS - OIL		
FRONT AIR DISC BRAKE INTERNAL ADJUSTERS		
SINGLE POWER STEERING GEAR, BENDIX, 12- 13.3K		
2 QUART SEE THROUGH POWER STEERING RESERVOIR		
MINERAL SAE 80/90 FRONT AXLE LUBE		
<b>Front Suspension</b>		
12,000# DUAL TAPERLEAF FRONT SUSPENSION		
MAINTENANCE FREE RUBBER BUSHINGS - FRONT SUSPENSION		
FRONT SHOCK ABSORBERS		
<b>Rear Axle and Equipment</b>		
RS-21-160 21,000# R-SERIES SINGLE REAR AXLE		-2,250
CONMET PRESET PLUS PREMIUM ALUMINUM REAR HUBS		
2.93 REAR AXLE RATIO		
IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING		
RPL25 MERITOR MAIN DRIVELINE	-20	-20
NO INTERAXLE (#3) DRIVELINE		-50
MERITOR EX-L OPTIMIZED AXIAL AIR DISC REAR BRAKES		-50

Description	Weight Front	Weight Rear
NON-ASBESTOS REAR BRAKE LINING		
BRAKE CAMS AND CHAMBERS ON REAR SIDE OF DRIVE AXLE(S)		
REAR DISC BRAKE ROTORS		
REAR BRAKE DUST SHIELDS		5
REAR OIL SEALS		
AIR DISC LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS		-20
REAR AIR DISC BRAKE INTERNAL ADJUSTERS		
MINERAL SAE 80/90 REAR AXLE LUBE		
STANDARD REAR AXLE BREATHER(S)		
<b>Rear Suspension</b>		
23,000# FLAT LEAF SPRING REAR SUSPENSION WITH RADIUS ROD		-410
8.5 INCH NOMINAL RIDE HEIGHT (430MM GLOBAL REFERENCE HEIGHT)		
STANDARD AXLE SEATS IN AXLE CLAMP GROUP		
NO REAR AIR SUSPENSION VALVE WIRING/LOGIC		
NO REAR CHASSIS SUSPENSION AIR PIPING		
FORE/AFT CONTROL RODS		
NO REAR SHOCK ABSORBERS		-80
<b>Brake System</b>		
WABCO 4S/4M ABS		
REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES		
RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE		
WABCO SYSTEM SAVER 1200 HEATED AIR DRYER WITH PRESSURE CONTROL VALVE		
WABCO OIL COALESCING FILTER FOR AIR DRYER		
AIR DRYER MOUNTED UNDER HOOD		
STEEL AIR BRAKE RESERVOIRS		
PULL CABLES ON ALL AIR RESERVOIR(S)		
<b>Trailer Connections</b>		
NO ADDITIONAL TRAILER CABLE RECEPTACLE		
<b>Wheelbase &amp; Frame</b>		
3725MM (147 INCH) WHEELBASE		

Description	Weight Front	Weight Rear
8.0MM X 82.0MM X 281.0MM STEEL FRAME (0.32X3.23X11.06 INCH) 120 KSI	99,999	99,999
950MM (37 INCH) REAR FRAME OVERHANG		
FRAME OVERHANG RANGE: 31 INCH TO 40 INCH	10	-60
CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 71.65 in		
CALC'D FRAME LENGTH - OVERALL : 229.21		
FRAME HEIGHT TOP FRONT UNLADEN : -10.12 in		
FRAME HEIGHT TOP FRONT LADEN : 38.93 in		
FRAME HEIGHT TOP REAR UNLADEN : 41.88 in		
FRAME HEIGHT TOP REAR LADEN : 26.78 in		
SQUARE END OF FRAME		
STANDARD WEIGHT ENGINE CROSSMEMBER		
STANDARD CROSSMEMBER BACK OF TRANSMISSION		
STANDARD CAST ALUMINUM MIDSHIP		
STANDARD REARMOST CROSSMEMBER		
STANDARD SUSPENSION CROSSMEMBER		
CAST ALUMINUM REAR SUSPENSION CROSSMEMBER		

### Chassis Equipment

UNPOLISHED ALUMINUM WST EQUIPMENT COVERS	
TEMPORARY STEEL BUMPER	-45
REMOVABLE FRONT TOW/RECOVERY DEVICE,STORED ON CHASSIS FRAME	15
CLASS 10.9 THREADED METRIC FASTENERS; REAR SUSPENSION HANGER TO BE HUCK-SPIN	
EXTERIOR HARNESES WRAPPED IN ABRASION TAPE	
NO TOOL/STORAGE BOX #1 MOUNTING LOCATION	
NO TOOL/STORAGE BOX #2 MOUNTING LOCATION	
NO TIRE PRESSURE CONTROL/SENSOR	
CHASSIS,MISC CUSTOM REQUIREMENTS-NONE	
NO ADDITIONAL LH MID-CHASSIS ROUTING & CLIPPING BRACKETS	
NO ADDITIONAL RH MID-CHAS ROUTING & CLIPPING BRACKETS	

Description	Weight Front	Weight Rear
<b>Fifth Wheel</b>		
NO FIFTH WHEEL RAMP		
<b>Fuel Tanks</b>		
60 GALLON/227 LITER ALUMINUM FUEL TANK - LH	-20	
25 INCH DIAMETER FUEL TANK(S)		
PLAIN ALUMINUM/PAINTED STEEL		
FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS		
FUEL TANK(S) FORWARD		
PLAIN STEP FINISH		
FUEL TANK CAP(S)		
EQUIFLO INBOARD FUEL SYSTEM		
HIGH TEMPERATURE REINFORCED NYLON FUEL LINE		
<b>Tires</b>		
CONTINENTAL HSR2 11R22.5 14 PLY RADIAL FRONT TIRES	16	
CONTINENTAL HSR2 11R22.5 14 PLY RADIAL REAR TIRES		32
<b>Wheels</b>		
MAXION WHEELS 90262 22.5X8.25 10-HUB PILOT 6.19 INSET 5-HAND STEEL DISC FRONT WHEELS	18	
MAXION WHEELS 90262 22.5X8.25 10-HUB PILOT 5-HAND STEEL DISC REAR WHEELS		36
NO SPARE WHEEL		
NO ADDITIONAL SPARE WHEEL		
NO POLISHED, BRIGHT STANDARD POLISH, BRUSHED OR BRIGHT LVL ONE SPARE WHEEL		
FRONT WHEEL MOUNTING NUTS		
REAR WHEEL MOUNTING NUTS		
NO PUSHER/TAG WHEEL MOUNTING NUTS		
<b>Cab Exterior</b>		
121 INCH BBC ALUMINUM CONVENTIONAL CAB		
STAINLESS STEEL CAB ACCENT MOLDING		
NO BAGGAGE DOOR		
NO SLEEPER DOOR		
FRONT FENDERS		



Description	Weight Front	Weight Rear
INTERIOR GRAB HANDLES WITH ADDED LOWER LH AND RH A PILLAR GRAB HANDLES BRIGHT HOOD MOUNTED AIR INTAKE GRILLE, BLACK SCREEN X-SERIES STEEL REINFORCED ALUMINUM CAB X-SERIES VOCATIONAL HOOD HOOD OPENING ASSIST WITH LOCKING STRUT PAINTED WESTERN STAR NAMEPLATES SINGLE AIR HORN UNDER LH DECK SINGLE ELECTRIC HORN DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME KEY QUANTITY OF 2 REAR LICENSE PLATE MOUNT END OF FRAME LED LOW BEAM AND HIGH BEAM HEADLIGHTS ROOF MOUNTED LED MARKER LIGHTS DAYTIME RUNNING LIGHTS INDIVIDUAL LED STOP/TURN/BACKUP LIGHTS GROMMET MOUNTED BELOW RAIL LED SIDE TURN SIGNAL NO LOAD LOCK CARRIERS C-BAR MIRROR SYSTEM WITH DUAL HEATED MIRRORS WITH INTEGRAL CONVEX, DUAL REMOTE, STAINLESS STEEL BACK COVER, AND BLACK C-BAR 102 INCH EQUIPMENT WIDTH LH AND RH CONVEX MIRRORS INTEGRAL WITH PRIMARY MIRRORS RH DOWN VIEW MIRROR STANDARD SIDE/REAR REFLECTORS NO SECURITY DEVICE UNPOLISHED ALUMINUM WST AFTERTREATMENT SYSTEM COVER NO SLEEPER VENT NO REAR WINDOW NO SIDE SLEEPER CAP WINDOWS 1-PIECE ROPED-IN SOLAR GREEN GLASS WINDSHIELD 8 LITER (2 GAL) WINDSHIELD WASHER RESERVOIR, CAB MOUNTED, WITHOUT FLUID LEVEL INDICATOR	-4	-20

## Cab Interior

Description	Weight Front	Weight Rear
X-SERIES BASE INTERIOR TRIM LEVEL PACKAGE		
CHARCOAL BLACK VINYL BASE LEVEL INTERIOR		
CARBON WITH BASE BLACK ACCENT BLACK MATS		
(2) DASH MOUNTED POWER OUTLETS AND COIN TRAY		
FORWARD ROOF MOUNTED CONSOLE		
NO AUX ELECTRICAL VAULT CLEAR SPACE REQUEST		
LH AND RH DOOR STORAGE POCKETS INTEGRATED INTO MOLDED DOOR PANELS		
(2) COAT HOOKS ON BACKWALL OF CAB		
DIGITAL ALARM CLOCK IN DRIVER DISPLAY		
NO CUP/THERMOS HOLDER		
NO FIRE EXTINGUISHER		
STANDARD HEATER PLUMBING		
RADIATOR MOUNTED AIR CONDITIONER CONDENSER		
STANDARD INSULATION		
NO BAGGAGE COMPARTMENT LIGHT		
STANDARD LED CAB LIGHTING		
NO SLEEPER INTERIOR LAMP		
LH AND RH ELECTRIC DOOR LOCKS WITH AUTO UNLOCK FEATURE WHEN DOOR IS SET FROM OPEN TO CLOSED POSITION		
BLACK DOOR HANDLES		
NO AC 120V CAB WIRING AND AC OUTLET		
BASIC 2.0 HIGH BACK AIR SUSPENSION DRIVER SEAT WITH 1 CHAMBER AIR LUMBAR, INTEGRATED CUSHION EXTENSION AND TILT		
BATTERY BOX MID BACK NON SUSPENSION PASSENGER SEAT		
NO SEAT ARMREST		
BLACK MORDURA CLOTH DRIVER SEAT COVER WITH EMBROIDERED LOGO		
BLACK MORDURA CLOTH PASSENGER SEAT COVER WITH NO LOGO		
3 POINT ADJUSTABLE D-RING RETRACTOR DRIVER AND FIXED D-RING RETRACTOR PASSENGER SEAT BELTS		
NO SUPPLEMENTAL RESTRAINT SYSTEM		

Description	Weight Front	Weight Rear
4-SPOKE 18 INCH (450MM) BLACK STEERING WHEEL WITH SWITCHES		
DRIVER AND PASSENGER INTERIOR SUN VISORS		

## Instruments & Controls

DIGITAL PANEL LAMP DIMMER SWITCH IN DRIVER DISPLAY

EXTRA GRIP FOOT CLUTCH PEDAL PAD, NON-ADJUSTABLE SUSPENDED PEDALS

ELECTRONIC ACCELERATOR CONTROL

STANDARD CENTER INSTRUMENT PANEL

BLACK GAUGE BEZELS

DUAL NEEDLE PRIMARY AND SECONDARY AIR PRESSURE GAUGE

INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS

ELECTRONIC CRUISE CONTROL WITH CONTROLS ON STEERING WHEEL SPOKES

KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY

PREMIUM INSTRUMENT CLUSTER WITH 5.0 INCH TFT COLOR DISPLAY

HEAVY DUTY ONBOARD DIAGNOSTICS INTERFACE CONNECTOR LOCATED BELOW LH DASH

2 INCH ELECTRIC FUEL GAUGE

ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE

NO ENGINE OIL TEMPERATURE GAUGE

NO TRANSMISSION TEMPERATURE GAUGE

ELECTRONIC OUTSIDE TEMPERATURE SENSOR DISPLAY IN DRIVER MESSAGE CENTER

ENGINE, TRIP AND PTO HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY

NO PTO CONTROLS

NO OBSTACLE DETECTION SYSTEM

NO VEHICLE STABILITY ADVISOR OR CONTROL

NO LANE DEPARTURE WARNING SYSTEM

ELECTRIC ENGINE OIL PRESSURE GAUGE

AM/FM/WB WORLD TUNER RADIO WITH AUXILIARY INPUT, J1939

Description	Weight Front	Weight Rear
DASH MOUNTED RADIO		
STANDARD SPEAKER SYSTEM		
NO AM/FM RADIO ANTENNA		
POWER AND GROUND WIRING PROVISION OVERHEAD		
ROOF/OVERHEAD CONSOLE CB RADIO PROVISION		
SINGLE REMOTE SPEAKER WITH LEAD FOR 2- WAY RADIO		
SINGLE FIBERGLASS LH MIRROR MOUNTED CB ANTENNA WITH BRACKET AND LEAD		
HEADLINER MULTI-BAND ANTENNA: AM/FM/WEATHERBAND, WIFI/BLUETOOTH, GNSS/GPS		
NO ANTENNA-RADIO,UHF/VHF		
NO TELEVISION ANTENNA/PROVISION		
ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER		
ELECTRONIC 2500 RPM TACHOMETER		
DETROIT CONNECT PLATFORM HARDWARE		
TMC RP1226 ACCESSORY CONNECTOR LOCATED BEHIND PASSENGER SIDE REMOVEABLE DASH PANEL		
IGNITION SWITCH CONTROLLED ENGINE STOP		
NO HARDWIRE SWITCH #1		
NO HARDWIRE SWITCH #2		
NO HARDWIRE SWITCH #3		
NO HARDWIRE SWITCH #4		
NO SW RCPTS & WRG, ALTN CSL LOC		
NO PRE TRIP SYSTEM TEST		
2 INCH TURBO AIR PRESSURE GAUGE		
DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY		
ROTARY HEADLAMP SWITCH, MARKER LIGHTS/HEADLIGHTS SWITCH WITH PULL OUT FOR OPTIONAL FOG/ROAD LAMPS		
ONE VALVE PARKING BRAKE SYSTEM WITH WARNING INDICATOR		
SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, HEADLAMP FLASH, WASH/WIPE/INTERMITTENT		

## Design

Description	Weight Front	Weight Rear
PAINT: ONE SOLID COLOR		
<b>Color</b>		
CAB COLOR A: L0006EY WHITE ELITE EY		
BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT		
POWDER WHITE (N0006EA) FRONT WHEELS/RIMS (PKWHT21, TKWHT21, W, TW)		
POWDER WHITE (N0006EA) REAR WHEELS/RIMS (PKWHT21, TKWHT21, W, TW)		
<b>Certification / Compliance</b>		
U.S. FMVSS CERTIFICATION, EXCEPT SALES CABS AND GLIDER KITS		
<b>Sales Programs</b>		
STARQUOTE STOCK TRUCK SALES PROGRAM		

## TOTAL VEHICLE SUMMARY

<b>Weight Summary</b>			
	Weight Front	Weight Rear	Total Weight
Factory Weight <sup>+</sup>	108448 lbs	103570 lbs	212018 lbs
Total Weight <sup>+</sup>	108448 lbs	103570 lbs	212018 lbs

(+) Weights shown are estimates only.

If weight is critical, contact Customer Application Engineering.

(\*\*\*) All cost increases for major components (Engines, Transmissions, Axles, Front and Rear Tires) and government mandated requirements, tariffs, and raw material surcharges will be passed through and added to factory invoices.