LIST OF DOCUMENTS TO BE PRODUCED BY JULIAN MATERIALS, LLC

1. All photographs taken during the sound pressure measurements conducted by RSG, whether in Julian's custody now or in RSG's custody now.

RESPONSE: These documents were previously produced to Attorney Dumont on October 10, 2023.

2. All documents Mr. Matosky relied on in concluding that any of the quarry operations are "grandfathered," as he said.

RESPONSE: These documents were voluntarily produced to Attorney Dumont in response to the request for subpoena and filed with Mr. Preston on October 11, 2023.

3. All existing documents in Julian's possession or control which describe or show the types of extraction equipment used (such as a hydraulic hammer) and/or the type, frequency and duration of noise created, at each of the three quarries in 2014 when the following noise standard was adopted: "Noise levels or frequencies which are not customary in the district or neighborhood or which represent a repeated disturbance to others shall not be permitted." (That is, the documents that show the noise loudness, duration and/or frequency of noise that is "grandfathered" under the current noise standards).

RESPONSE: The only related information we are aware of relates to noise testing undertaken by RSG for Act 250 proceeding for the South Quarry n 2005. The reports are available on Agency of Natural Resources Act 250 database under application under

4. All existing photographs, test results and other documents in Julian's possession or control which depict, describe or explain the discharges into the brook immediately west of or adjoining the Chandler Road Quarry which have occurred in 2022 and/or 2023, including the

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BURLINGTON, VERMONT 05401

nature of the materials being discharged into any stream or river and the quantity, frequency and location of each discharge.

RESPONSE: See attached.

5. All existing documents in Julian's possession or control which depict, describe or explain how each of those discharges will be eliminated going forward, including:

a) the date on which the discharges are expected to cease, b) the means or methods that will be used to eliminate the discharges; and c) all permits applied for to authorize any discharge.

RESPONSE: See attached.

6. All existing documents in Julian's possession or control which describe or show how digging down to excavate rock, rather than quarrying rock from the side of a face, will be accomplished at any quarry where Julian seeks permission to dig down to excavate rock rather than to quarry rock from the side of a rock face.

RESPONSE: See Julian Exhibits U, V, X, Y and Z. We are not aware what this refers to. The rock to be removed from the South Quarry will be done in the same manner as the prior approvals with the addition of one additional lower bench on the quarry wall, as shown in the site plan and cross sections already provided.

7. All existing documents in Julian's possession or control that describe or show the locations where Julian will be excavating by digging down rather than quarrying rock from the side of a rock face.

RESPONSE: See prior response. Julian Exhibits U, V, X, Y and Z.

8. All existing documents in Julian's possession or control that show the quantity of rock that will be removed by digging down rather than quarrying from the side of a rock face.

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RESPONSE: See Exhibits U, V, X, Y and Z. From these documents a person can calculate the estimated quantities of rock to be removed based on the existing vs. proposed

contours or using the sections and measuring the project limits in plain view. A quick estimate was performed by Jeremy Matosky, P.E. on 10/17/2023 based on the size of the proposed building for the South Quarry it is estimated that between 135,000-150,000 cubic yards of stone and/or overburden will need to be removed or relocated to make way for the new building. A lot of that could be moved on site to construct a berm on the eastern portion of the quarry site, until it can be processed and sold.

Similarly, at the North Quarry, the grading plans and cross sections can be used to estimate the volume of material needed to be removed to reach the final proposed grades. Jeremy M. Matosky, P.E. on 10/17/2023 estimated that between 20-25,000 cubic yards of stone and/or overburden will need to be removed from that site.

9. All existing documents in Julian's possession or control that describe or show the time period during which Julian will be digging down rather than quarrying from the side of a rock face.

RESPONSE: Only document provided outlining a timeline for construction of the new building or the contractor yard is the Presentation – Exhibit GG and the Project Narrative, Exhibit D.

10. All existing photographs or engineering plans or other plans in Julian's possession or control for the cutting devices in the storage shed at the Chandler Road Quarry when they were installed, and at present if they have changed.

RESPONSE: See attached.

11. All existing records in Julian's possession or control showing the dust, noise, traffic, water pollution, and other impacts of past use of the cutting devices in the building in the

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Chandler Road Quarry, and showing the dust, noise, traffic, water pollution and other impacts of proposed future use.

RESPONSE: See attached.

12. All records in Julian's possession or control of all inspections of the each of the quarries, including the buildings, by state, federal or local officials, including but not limited to MSHA (which Mr. Matosky referred to), including but not limited to notices of violations found during inspections.

RESPONSE: See attached files from the Agency of Natural Resources.

DATED this 10th day of October, 2023.

JULIAN MATERIALS, LLC

BY: PAUL FRANK + COLLINS P.C.

BY: */s/ Mark G. Hall*

Mark G. Hall, Esq.
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SUBPOENA RESPONSE #3 AND #10

In #3 and #10
Equipment purchased for Chandler Road

SCHEDULE OF EQUIPMENT AT 137 CHANDLER ROAD CHESTER VT

1. JOHN DEERE 160 LC WITH THUMB ATTACHMENT

2 HYUNDAI 210 LC-7 EXCAVATOR WITH BUCKET AND MAVERICK MV 4750 HAMMER ATTACHMENTS

3 JOHN DEERE 544 G WHEEL LOADER

4 CEE JAY 70 TON SPLITTER WITH POWER UNIT

From #3 and #10 Exhibit B

These may be the machines used to shape rocks at Chandler Rock

Exhibit B

Cee Jay 350 splitter- ser. 04007

olympian DP50 Genset- ser-oly0000knpl00775

926 JCB 4wd Forklift

Komatsu 200lc-7- ser A87312

Tramac BVR32 Hydraulic Hammer - ser 84240

6 - 1.5 HD self tipping Hoppers

1 - 3yd custom JRB comp. Hopper

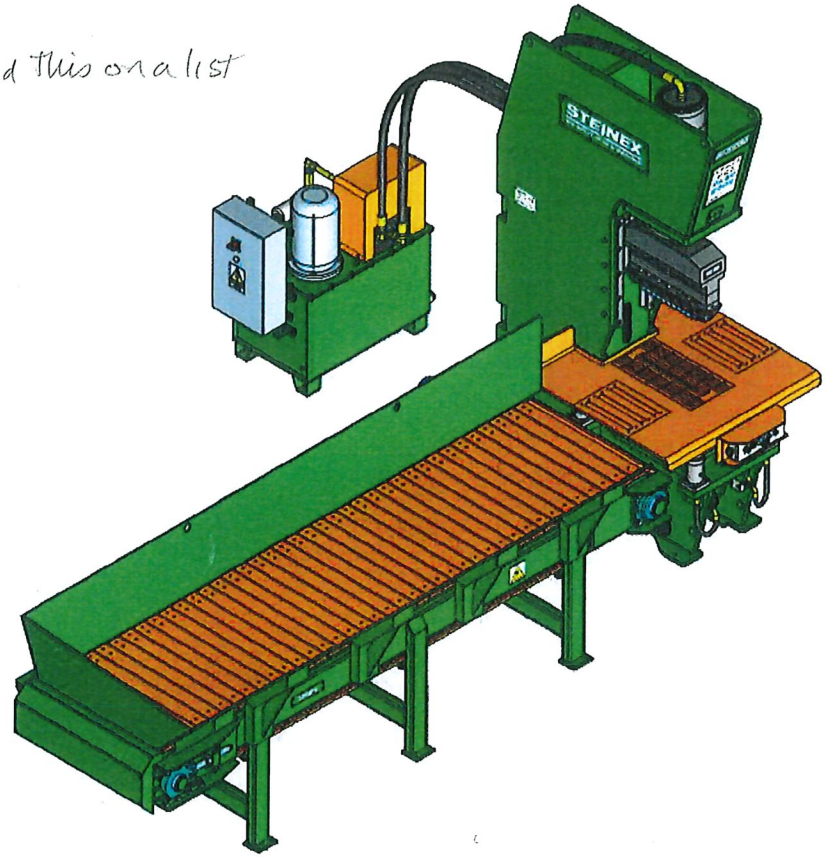
2 - 10K lb Platform Scales

2 - Chop saws

$76,170.00 fob WHITEHALL, NY 12887

$55,320.00 USD SPLITTER w/o CONVEYOR

Can't find this on a list



IGLOO 120 480 X 450 15Kw w/SHERPA T4L*

- 132 TON SPLITTING FORCE *CHOICE OF CONVEYOR DIRECTION
- 18.9" BLADE LENGTH and 17.72" SPLITTING HEIGHT
- 15 KW PUMP UPGRADE producing BLADE SPEEDS of;
- 6.39" PER SECOND DESCENT and 7.17" PER SECOND RETRACT
- REINFORCED 13.12' LONG CONVEYOR w/ HIGH SIDEBOARDS
- 39.37" WIDE, 37.4" HIGH and 3.94" PER SECOND SPEEDS
- TESTED and PRESSURES SET PRIOR TO SHIPMENT

ApexEquipmentInternational.Com (518) 499-0602 ApexEquipIntl@aol.com

#3 & 10 3

Park Industries®

Equipment Proposal

Customer: Julian Enterprises
Date: May 10, 2018
Machine: HydroClear 100 Water System

Machine Description	*Price*

HydroClear System Model #100
Includes: Controller, Auto purge valve, Tower, (2) Sludge skids, 10 Sludge bags,
First stage chemical feed pump, Chemical feed tank, Floats, and 4 gallons coagulant

Transfer Tank Options
2500 gallon cone bottomed tank
2" Auxiliary Auto Purge Valve

Slurry Pump Options
1.5 HP, 220 VAC, Single Phase - Slurry Pump

Pump Skid Options
5 hp pump skid (40-100 gpm @ 130 ft head)

Park Industries Support & Services Included:
One Year Limited Warranty (see Warranty Plan for details)
"Next Day or No Pay" Parts Guarantee Plan
Detailed operator/maintenance manual with electrical schematics
Domestic toll free technical phone support
On-site domestic service available
Includes Installation

Total System Price, FOB St. Cloud Mn, Freight is Included.....	$	68,034

Optional:

1.5" Pneumatic slurry pump w/solenoid, filter & regulator (Arch option)	$2,330
2-0" Pneumatic slurry pump w/solenoid, filter & regulator (Arch option)	$2,836
Stainless Steel Pump Cage (Elect. Slurry Pumps only)	$1,241
Sludge Bag Cubic Yard (additional)	$23
Sludge Skid (additional)	$1,696

Confidential Information
All Pricing is FOB St. Cloud, Minnesota
* Offer is valid for 30 days unless otherwise indicated *

#3810 4

KOMATSU®

PC360LC-11

Tier 4 Final Engine

PC360LC

HYDRAULIC EXCAVATOR

Photos may include optional equipment.

NET HORSEPOWER
257 HP @ 1950 rpm
192 kW @ 1950 rpm

OPERATING WEIGHT
78,645–80,547 lb
35,627–36,535 kg

BUCKET CAPACITY
0.89–2.56 yd³
0.68–1.96 m³

#3810 5

WALK-AROUND

PC360LC-11

Photos may include optional equipment

NET HORSEPOWER	OPERATING WEIGHT	BUCKET CAPACITY
257 HP @ 1950 rpm 192 kW @ 1950 rpm	78,645–80,547 lb 35,627–36,535 kg	0.89–2.56 yd^3 0.68–1.96 m^3

#3 & 10 6

SPECIFICATIONS

PC360LC-11

ENGINE

Model ..... Komatsu SAA6D114E 6*
Type ..... Water-cooled, 4-cycle, direct injection
Aspiration ..... Variable Geometry Turbocharger with air-to-air aftercooler and EGR
Number of cylinders 6
Bore ..... 114 mm **4.49"**
Stroke ..... 144.5 mm **5.69"**
Piston displacement ..... 8.85 ltr **540 in³**
Horsepower
SAE J1995 ..... Gross 202 kW **271 HP**
ISO 9249 / SAE J1349 ..... Net 192 kW **257 HP**
Rated rpm **1950**
Governor ..... All-speed control, electronic
Fan drive method for radiator cooling ..... Mechanical

*EPA Tier 4 Final emissions certified

HYDRAULICS

Type ... HydrauMind (Hydraulic Mechanical Intelligence) system, closed-center system with load sensing valve and pressure compensated valves, 6 selectable working modes

Main pump:
Pumps for ..... Boom, arm, bucket, swing, and travel circuits
Type ..... Variable displacement axial piston type
Maximum flow ..... 535 ltr/min **141.3 gal/min**
Supply for control circuit ..... Self reducing valve

Hydraulic motors:
Travel ..... 2 x axial piston motors with parking brake
Swing ..... 1 x axial piston motor with swing holding brake

Relief valve setting:
Implement circuits ..... 37.3 MPa 380 kgf/cm² **5,400 psi**
Travel circuit ..... 37.3 MPa 380 kgf/cm² **5,400 psi**
Swing circuit ..... 27.9 MPa 285 kgf/cm² **4,050 psi**
Pilot circuit ..... 3.2 MPa 33 kgf/cm² **470 psi**

Hydraulic cylinders:
(Number of cylinders – bore x stroke x rod diameter)
Boom 2–140 mm x 1480 mm x 100 mm **5.5" x 58.3" x 3.9"**
Arm 1–160 mm x 1825 mm x 110 mm **6.3" x 71.9" x 4.3"**
Bucket ..... for 3.2 m **10'5"** and 4.0 m **13'2"** Arms
1–140 mm x 1285 mm x 100 mm **5.5" x 50.6" x 3.9"**
..... for 2.54 m **8'4"** Arm
1–150 mm x 1285 mm x 110 mm **5.9" x 50.6" x 4.3"**

DRIVES AND BRAKES

Steering control ..... Two lever with pedals
Drive method ..... Hydrostatic
Maximum drawbar pull ..... 290 kN 29570 kgf **65,191 lbf**
Gradeability ..... 70%, 35°
Maximum travel speed (auto shift):
High ..... 5.5 km/h **3.4 mph**
Mid ..... 4.2 km/h **2.8 mph**
Low ..... 3.2 km/h **2.0 mph**
Service brake ..... Hydraulic lock
Parking brake ..... Mechanical disc brake

SWING SYSTEM

Driven by ..... Hydraulic motor
Swing reduction ..... Planetary gear
Swing circle lubrication ..... Grease-bathed
Service brake ..... Hydraulic lock
Holding brake/Swing lock ..... Mechanical disc brake
Swing speed ..... 9.5 rpm
Swing torque ..... 11386 kg•m **82,313 ft lbs**

UNDERCARRIAGE

Center frame ..... X-frame
Track frame ..... Box-section
Track type ..... Sealed
Track adjuster ..... Hydraulic
Number of shoes (each side) 48
Number of carrier rollers (each side) 2
Number of track rollers (each side) 8

COOLANT & LUBRICANT CAPACITY (REFILLING)

Fuel tank ..... 605 ltr **159.8 U.S. gal**
Radiator ..... 37 ltr **9.7 U.S. gal**
Engine ..... 35 ltr **9.2 U.S. gal**
Final drive, each side ..... 9.0 ltr **2.4 U.S. gal**
Swing drive ..... 13.7 ltr **3.6 U.S. gal**
Hydraulic tank ..... 188 ltr **49.7 U.S. gal**
Diesel Exhaust Fluid (DEF) tank ..... 39 ltr **10.3 U.S. gal**

SOUND PERFORMANCE

Exterior – ISO 6396 ..... 103 dB(A)
Interior – ISO 6396 ..... 71 dB(A)

OPERATING WEIGHT (APPROXIMATE)

Operating weight includes 6500 mm **21'3"** one-piece HD boom, 3185 mm **10'5"** arm, SAE heaped 1.96 m³ **2.56 yd³** bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Triple-Grouser Shoes	Operating Weight	Ground Pressure (ISO 16754)
700 mm	35748 kg	0.59 kg/cm²
28"	**78,845 lb**	**8.34 psi**
800 mm	36129 kg	0.52 kg/cm²
31.5"	**79,483 lb**	**7.38 psi**
850 mm	36509 kg	0.50 kg/cm²
33.5"	**80,320 lb**	**7.02 psi**

WORKING FORCES

	Arm Length	2540 mm 8'4"	3185 mm 10'5"	4020 mm 13'2"
ISO rating	Bucket digging force	229 kN 23300 kgf / **51,370 lb**	200 kN 20400 kgf / **44,970 lb**	200 kN 20400 kgf / **44,970 lb**
	Arm crowd force	193 kN 19700 kgf / **43,430 lb**	165 kN 16800 kgf / **37,040 lb**	139 kN 14200 kgf / **31,310 lb**
SAE rating	Bucket digging force	259 kN 26400 kgf / **58,200 lb**	228 kN 23200 kgf / **51,150 lb**	227 kN 23100 kgf / **50,930 lb**
	Arm crowd force	201 kN 20500 kgf / **45,190 lb**	171 kN 17400 kgf / **38,360 lb**	144 kN 14700 kgf / **32,410 lb**

Component Weights

Arm including bucket cylinder and linkage
3185 mm **10'5"** arm assembly ..... 1761 kg **3,882 lb**
4020 mm **13'2"** arm assembly ..... 1988 kg **4,383 lb**
One piece HD boom including arm cylinder
6500 mm **21'3"** boom assembly ..... 3135 kg **6,912 lb**
Boom cylinders x 2 ..... 259 kg **571 lb**
Counterweight ..... 6920 kg **15,255 lb**

#3 & 10 7

KOMATSU CARE

GREATER PERFORMANCE & FASTER CYCLE TIMES

Komatsu's Closed-center Load Sensing System (CLSS) provides quick response and smooth operation to maximize productivity.

Power Mode with enhanced engine and hydraulic pump control logic provides greater hydraulic power and speed for faster cycle times, improved multifunction performance and up to 12% greater productivity than the previous model.

A powerful Komatsu SAA6D114E-6 engine provides a net output of 192 kW 257 HP. This engine is EPA Tier 4 Final emissions certified.

Variable Geometry Turbocharger (VGT) uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR) system reduce particulate matter and NOx while providing automatic regeneration that does not interfere with daily operation.

Large displacement high efficiency pumps provide high flow output at lower engine speed, improving efficiency.

6 Working modes are designed to match engine speed, pump delivery and system pressure to the application.

Power Mode
provides improved power and hydraulic flow for faster cycle times and multifunction operation.

Two boom mode settings provide power mode for maximum digging force or smooth mode for fine grading operations.

Komatsu's Closed-center Load Sensing System (CLSS)
provides quick response and smooth operation to maximize productivity.

Rearview monitoring system (standard) with integrated camera display in the default monitor screen.

The **KOMTRAX®** telematics system is standard on Komatsu equipment with no subscription fees throughout the life of the machine. Using wireless technology, KOMTRAX® transmits valuable information such as location, utilization, and maintenance records to a PC or smartphone app. Custom machine reports are provided for identifying machine efficiency and operating trends. KOMTRAX® also provides advanced machine troubleshooting capabilities by continuously monitoring machine health.

Large LCD color monitor:

- 7" high resolution display
- Enhanced hydraulic attachment control with one way/two way flow and programmable work tool names and settings
- Rear view camera display integrated into the default monitor screen
- Key machine settings and controls easily accessible through the monitor

Enhanced working environment

- High back, heated air suspension seat with adjustable arm rests
- Integrated ROPS cab design
- Cab meets ISO Level 1 Operator Protective Guard (OPG) top guard
- Standard pattern change valve to switch between ISO and BH control pattern
- Auxiliary jack and (2) 12V power outlets
- Auto climate control

Komatsu designed and manufactured components

Handrails (standard) located on the machine's upper structure provide a convenient work area in front of the engine.

Battery disconnect switch allows a technician to disconnect the power supply before servicing the machine.

Heavy duty boom design with large one piece castings provide increased strength and durability.

Komatsu Auto Idle Shutdown helps reduce nonproductive engine idle time and reduces operating costs.

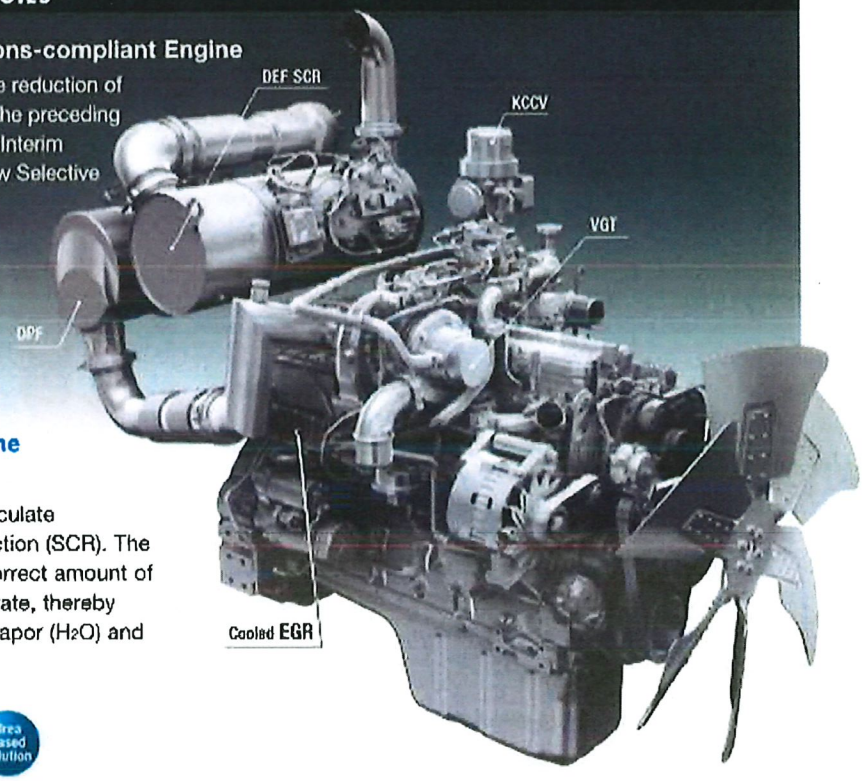
Operator Identification System records KOMTRAX® machine operation and application data for up to 100 individual ID codes.

PERFORMANCE FEATURES

KOMATSU NEW ENGINE TECHNOLOGIES

Komatsu's New Emission Regulations-compliant Engine

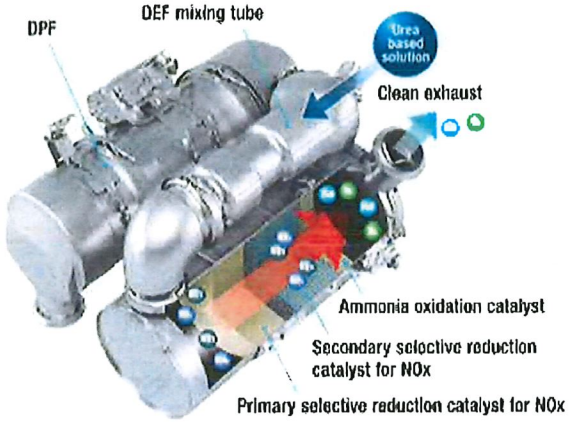
New regulations effective in 2014 require the reduction of NOx emissions to one tenth or below from the preceding regulations. In addition to refining the Tier 4 Interim technologies, Komatsu has developed a new Selective Catalytic Reduction (SCR) device in-house.



Technologies Applied to New Engine

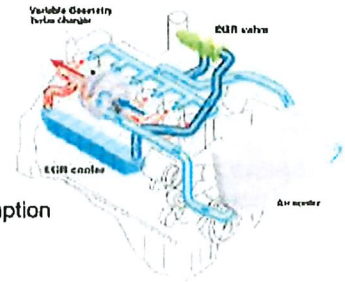
Heavy-duty aftertreatment system

This new system combines a Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the correct amount of Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into non-toxic water vapor (H_2O) and nitrogen gas (N_2).



Heavy-duty cooled Exhaust Gas Recirculation (EGR) system

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby reducing NOx emissions. EGR gas flow has been decreased for Tier 4 Final with the addition of SCR technology. The system achieves a dynamic reduction of NOx, while helping reduce fuel consumption below Tier 4 Interim levels.

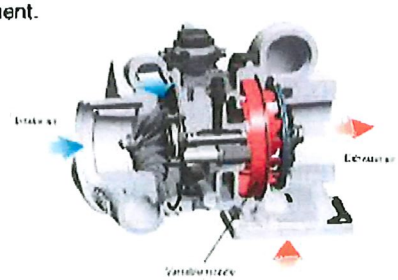


Advanced Electronic Control System

The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle providing total control of equipment in all conditions of use. Engine condition information is displayed via an on-board network to the monitor inside the cab, providing necessary information to the operator. Additionally, managing the information via KOMTRAX helps customers keep up with required maintenance.

Variable Geometry Turbocharger (VGT) system

The VGT system features proven Komatsu-designed hydraulic technology for variable control of air-flow and supplies optimal air according to load conditions. The upgraded version provides better exhaust temperature management.

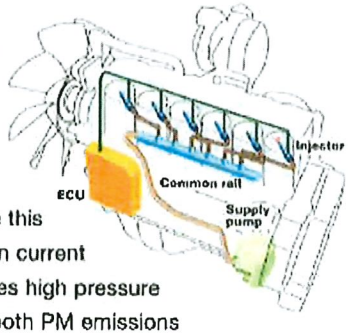


Komatsu Auto Idle Shutdown

Komatsu auto idle shutdown automatically shuts the engine down after idling for a set period of time to reduce unnecessary fuel consumption and exhaust emissions. The amount of time before the engine is shutdown can be easily programmed from 5 to 60 minutes.

Heavy-Duty High-Pressure Common Rail (HPCR) Fuel Injection System

The system is designed to achieve an optimal injection of high-pressure fuel by means of computerized control, providing close to complete combustion to reduce PM emissions. While this technology is already used in current engines, the new system uses high pressure injection, thereby reducing both PM emissions and fuel consumption over the entire range of engine operating conditions. The Tier 4 Final engine has advanced fuel injection timing for reduced fuel consumption and lower soot levels.



Enhanced Productivity

The PC360LC-11's P Mode provides improved performance in demanding applications.

Productivity

Up to 12% increase
(compared to the PC360LC-10 in P Mode)
P mode (90° swing truck loading)

Increased Work Efficiency

Large digging force

With the one-touch Power Max. function, digging force is increased for 8.5 seconds of operation.

Maximum arm crowd force (ISO)

160 kN(16.3t) ➡ 171 kN(17.4t) 7% UP
(With Power Max.)

Maximum bucket digging force (ISO)

213 kN(21.7t) ➡ 228 kN(23.2t) 7% UP
(With Power Max.)

Measured with Power Max. function, 3185 mm arm and ISO rating

Faster arm cycle speeds

Two return hoses improve arm cylinder hydraulic flow for faster arm out performance.

Two-mode settings for boom

- Smooth boom mode reduces boom down force for working on hard surfaces or for hydraulic hammer operation.
- Power boom mode maximizes digging force for more effective excavating

Lifting mode

When the Lifting mode is selected, lifting capacity is increased 7% by raising hydraulic pressure.

WORKING ENVIRONMENT

Comfortable Working Space

Wide spacious cab

Wide spacious cab includes seat with reclining backrest. The seat height and longitudinal inclination are easily adjusted using a pull-up lever. You can set the appropriate operational posture of armrest together with the console. Reclining the seat further enables you to place it into the fully flat state with the headrest attached.

Armrest with simple height adjustment function

A plunger and lock permits simple and fast adjustments for armrest height.

Low vibration with cab damper mounting

Automatic climate control

Pressurized cab

Auxiliary input jack

An auxiliary audio input makes it easy to connect a device to play audio through the standard speakers.

Standard Equipment

Sliding window glass (left side)

Lockout Tagout Ready

Remote intermittent wiper with windshield washer

Tie Off Points Standard (ISO 14567)

Opening & closing skylight

Magazine box & cup holder

Defroster (conforms to the ISO standard)

One-touch storable front window lower glass

WORKING ENVIRONMENT

PC360LC-11

LARGE HIGH RESOLUTION LCD MONITOR

New Monitor Panel Interface Design

An updated large high resolution LCD color monitor enables accurate and smooth work. The interface has been redesigned to display key machine information in a new user friendly interface. A rear view camera and a DEF level gauge display have been added to the default main screen. The interface has a function that enables the main screen mode to be switched, thus enabling the optimum screen information for the particular work situation to be displayed.

Indicators

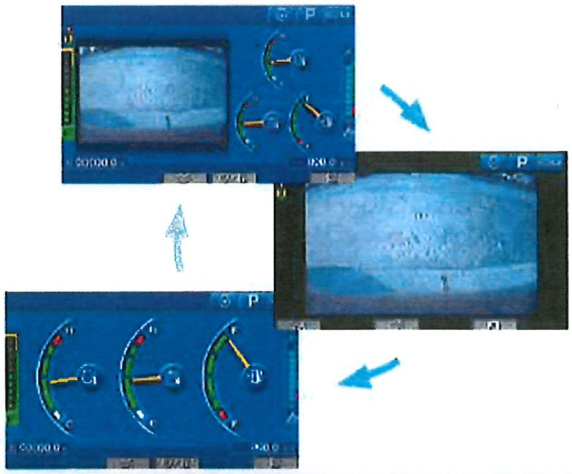
1. Auto-decelerator
2. Working mode
3. Travel speed
4. Ecology gauge
5. Camera display
6. Engine coolant temperature gauge
7. Hydraulic oil temperature gauge
8. Fuel gauge
9. DEF level gauge
10. Service meter, clock
11. Fuel consumption gauge
12. Guidance icon
13. Function switches
14. Camera direction display
15. DEF level caution lamp

Basic operation switches

1. Auto-decelerator
2. Working mode selector
3. Travel speed selector
4. Buzzer cancel
5. Wiper
6. Window washer
7. Auto climate controls

Switchable Display Modes

The main screen display mode can be changed by pressing the F3 key.



Visual user menu

Pressing the F6 key on the main screen displays the user menu screen. The menus are grouped for each function, and use easy-to-understand icons which enable the machine to be operated easily.

1. Energy saving guidance
2. Machine settings
3. Aftertreatment devices regeneration
4. SCR information
5. Maintenance
6. Monitor setting
7. Message check

Support Efficiency Improvement

Ecology guidance

While the machine is operating, ecology guidance pops up on the monitor screen to notify the operator of the status of the machine in real time.

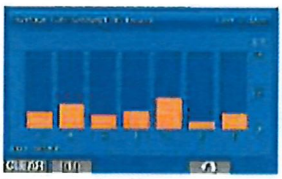
Ecology gauge & fuel consumption gauge

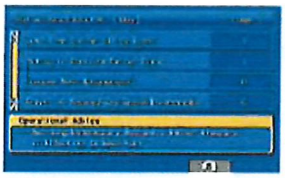
The monitor screen is provided with an ecology gauge and also a fuel consumption gauge which is displayed continuously. In addition, the operator can set any desired target value of fuel consumption (within the range of the green display), enabling the machine to be operated with better fuel economy.

Operation record, fuel consumption history, and ecology guidance record

The ecology guidance menu enables the operator to check the operation record, fuel consumption history and ecology guidance record from the ecology guidance menu, using a single touch, thus enabling the total fuel consumption to be reduced.


Operation record


Fuel consumption history


Ecology guidance record

Operator Identification Function

An identification ID can be set up for individual operator, application or jobs, and used to manage operation information of individual machines using KOMTRAX data. Data sent from KOMTRAX can be used to analyze operation status by operator as well as by machine.

MAINTENANCE FEATURES

Large capacity air cleaner

The larger air cleaner can extend air cleaner life during long-term operation and helps prevent early clogging, and resulting power loss. A radial seal design is used for reliability.

Engine Access

Large rear opening hood provides excellent maintenance and service access to key engine components.

Fuel Filters

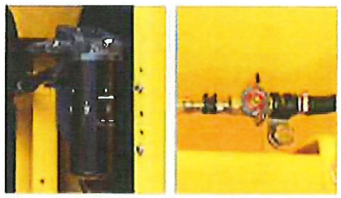
Large high-efficiency fuel filter and pre-filter with water separator removes contaminants from fuel for improved fuel injection system life. Built-in priming pump simplifies maintenance.

High efficiency fuel filter

Fuel pre-filter (with water separator)

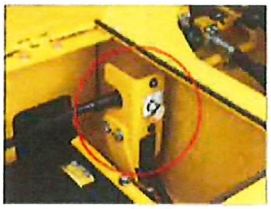
Easy access to engine oil filter and fuel drain valve

Engine oil filter and fuel drain valve are remote mounted to improve accessibility.



Battery disconnect switch

A standard battery disconnect switch allows a technician to disconnect the power supply and lock out before servicing the machine.



Air conditioner filter

The air conditioner filter can be removed and installed without the use of tools for easy filter maintenance.

Washable cab floormat

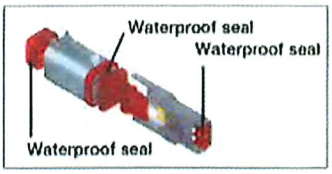
Sloping track frame

Long-life oils, filters

Engine oil & engine oil filter	every **500** hours
Hydraulic oil	every **5000** hours
Hydraulic oil filter	every **1000** hours

DT-type connectors

Sealed DT-type electrical connectors provide high reliability, water and dust resistance.



Diesel Exhaust Fluid (DEF) tank

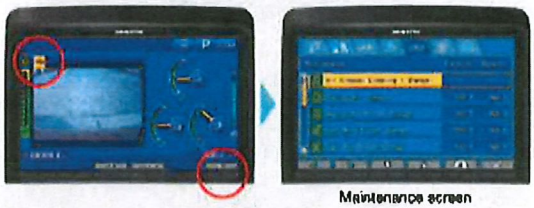
A large tank volume extends operating time before refilling and is installed on the right front platform for easy access. DEF tank and pump are separated for improved service access.

Maintenance Information

"Maintenance time caution lamp" display

When the remaining time to maintenance becomes less than 30 hours*, a maintenance time monitor appears. Pressing the F6 key switches the monitor to the maintenance screen.

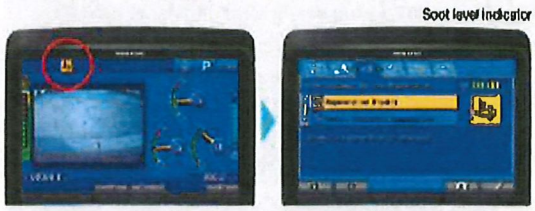
*: The setting can be changed within the range between 10 and 200 hours.



Maintenance screen

Manual Stational Regeneration

Under most conditions, active regeneration will occur automatically with no effect on machine operation. In case the operator needs to disable active regeneration or initiate a manual stationary regeneration, this can be easily accomplished through the monitor panel. A soot level indicator is displayed to show how much soot is trapped in the DPF.



Aftertreatment device regeneration screen

Supports the DEF level and refill timing

The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when DEF level is low, DEF low level guidance messages appear in pop up displays to inform the operator in real time.

DEF level gauge

DEF low level guidance

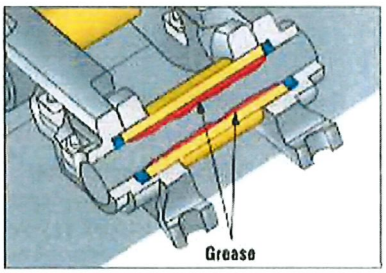
MAINTENANCE FEATURES

Drawbar Pull

The Komatsu designed final drives and undercarriage provide high drawbar pull for good maneuverability and performance when working on adverse grades or soft ground.

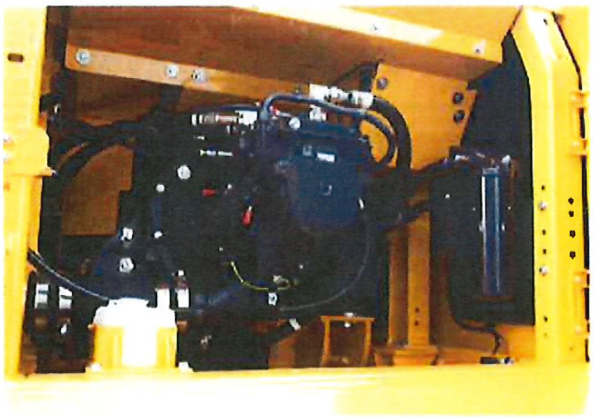
Grease Sealed Track

The PC360LC-11 uses grease sealed tracks for extended undercarriage life.



Large Displacement High Efficiency Pump

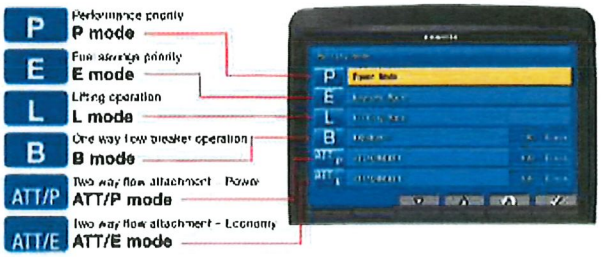
Large displacement hydraulic implement pumps provide high flow output at lower engine RPMs as well as operation at the most efficient engine speed.



Working Mode Selection

The PC360LC-11 excavator is equipped with six working modes (P, E, L, B, ATT/P and ATT/E). Power Mode provides improved hydraulic power and faster cycle times for improved performance in demanding applications. Each mode is designed to match engine speed, pump flow, and system pressure to the application. The PC360LC-11 features an attachment mode (ATT/E) that allows operators to run attachments while in Economy mode.

Working Mode	Application	Advantage
P	Power Mode	•Maximum production, power & multifunction
E	Economy Mode	•Good cycle times with reduced fuel consumption
L	Lifting Mode/ Fine Control	•Increased lifting power & fine control
B	Breaker Mode	•One way flow for hydraulic breaker operation
ATT/P	Attachment Power Mode	•Two way flow with maximum power
ATT/E	Attachment Economy Mode	•Two way flow with most efficient fuel economy



High Rigidity Work Equipment

Booms and arms are constructed with thick plates of high tensile strength steel. In addition, these structures are designed with large cross sectional areas and large one piece castings in the boom foot, the boom tip, and the arm tip. The result is work equipment that exhibits long term durability and high resistance to bending and torsional stress. A standard HD boom design provides increased strength and reliability.

GENERAL FEATURES

ROPS CAB STRUCTURE

ROPS Cab (ISO 12117-2)

The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. It also satisfies the requirements for Level 1 Operator Protective Guard (OPG) and top guard (ISO 10262).

Rear View Monitoring System

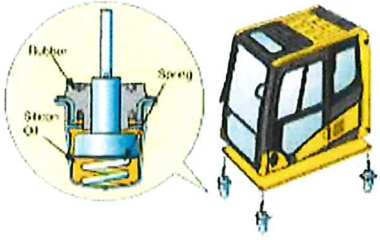
A new rear view monitoring system display has a rear view camera image that is continuously displayed together with the gauges and important vehicle information. This enables the operator to carry out work while easily checking the surrounding area.

Rear view camera

Rear view image on monitor

Low Vibration with Viscous Cab Mounts

The PC360LC-11 uses viscous mounts for the cab that incorporate a longer stroke and the addition of a spring. The cab damper mounting combined with a high rigidity deck reduces vibration at the operator's seat.



General Features

Secondary engine shut down switch at base of seat to shutdown the engine.

Seat belt caution indicator

Lock lever

Retractable seat belt

Tempered & tinted glass

Large cab entrance step

Left and right side handrails

Large mirrors

Slip-resistant plates

Thermal and fan guards

Pump/engine compartment partition

Travel alarm

KOMATSU PARTS & SERVICE SUPPORT

PC360LC-11

KOMATSU CARE

Program Includes:
*The PC360LC-11 comes standard with complimentary factory scheduled maintenance for the first 3 Years or 2,000 Hours, whichever occurs first.

Planned Maintenance Intervals at:
500/1000/1500/2000 hour intervals. (250 hr. initial interval for some products) Complimentary Maintenance Interval includes: Replacement of Oils & Fluid Filters with genuine Komatsu Parts, 50-Point inspection, Komatsu Oil & Wear Analysis Sampling (KOWA) / Travel & Mileage (distance set by distributor; additional charges may apply)

Benefits of Using Komatsu CARE

- Assurance of Proper Maintenance with OEM Parts & Service
- Increased Uptime & Efficiency
- Factory Certified Technicians Performing Work
- Cost of Ownership Savings
- Transferable Upon Resale

Complimentary DPF Exchange

The PC360LC-11 comes standard with 2 Complimentary DPF Exchange units for the first 5 Years or 9000 hours whichever occurs first. The suggested DPF Exchange unit service intervals are 4500 hours & 9000 hours. End user must have authorized Komatsu distributor perform the removal & installation of the DPF.

Complimentary SCR Maintenance

The PC360LC-11 also includes 2 factory recommended services of the Selective Catalytic Reduction (SCR) Diesel Exhaust Fluid (DEF) system during the first 5 Years or 9000 hours whichever occurs first. The service includes factory recommended DEF tank flush & strainer cleaning at the suggested service intervals of 4500 hours & 9000 hours.

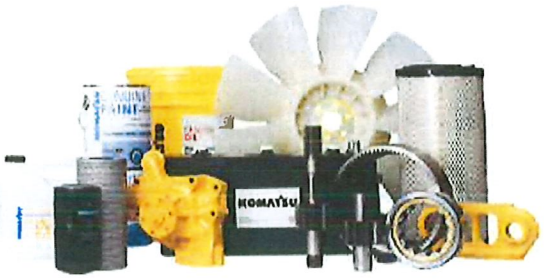
Interval PM	500	1000	1500	2000
KOWA SAMPLING (Engine, Hydraulics, Swing Circle, L & R Final Drives)	✓	✓	✓	✓
LUBRICATE MACHINE	✓	✓	✓	✓
LUBRICATE SWING CIRCLE	✓	✓	✓	✓
CHECK SWING PINION GREASE LEVEL AND ADD, WHEN NECESSARY	✓	✓	✓	✓
CHANGE ENGINE OIL	✓	✓	✓	✓
REPLACE ENGINE OIL FILTER	✓	✓	✓	✓
REPLACE FUEL PRE-FILTER	✓	✓	✓	✓
REPLACE AC FRESH & RECIRC AIR FILTERS	✓	✓	✓	✓
CLEAN AIR CLEANER ELEMENT	✓	✓	✓	✓
DRAIN SEDIMENT FROM FUEL TANK	✓	✓	✓	✓
COMPLETE 50 POINT INSPECTION FORM; LEAVE PINK COPY WITH CUSTOMER OR IN CAB	✓	✓	✓	✓
RESET MONITOR PANEL MAINTENANCE COUNTER FOR APPROPRIATE ITEMS	✓	✓	✓	✓
REPLACE HYDRAULIC TANK BREATHER ELEMENT		✓		✓
REPLACE DEF TANK BREATHER ELEMENT		✓		✓
CHECK OIL LEVEL IN DAMPER CASE, ADD WHEN NECESSARY		✓		✓
REPLACE MAIN FUEL FILTER		✓		✓
CHANGE SWING MACHINERY OIL		✓		✓
REPLACE HYDRAULIC OIL FILTER ELEMENT		✓		✓
CLEAN HYDRAULIC TANK STRAINER				✓
CHANGE FINAL DRIVE OIL				✓
REPLACE KCCV FILTER ELEMENT				✓
REPLACE DEF PUMP FILTER				✓
FACTORY TRAINED TECHNICIAN LABOR	✓	✓	✓	✓

2 DPF Exchanges suggested at 4,500 Hrs and 9,000 Hrs.
2 SCR System Maintenance Services suggested at 4,500 Hrs. and 9000 Hrs.

KOMATSU CARE®

Komatsu CARE® – Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs



Komatsu Parts Support

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction

Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

* Certain exclusions and limitations apply. Refer to the customer certificate for complete program details and eligibility. Komatsu® and Komatsu Care® are registered trademarks of Komatsu Ltd.

KOMTRAX EQUIPMENT MONITORING

GET THE WHOLE STORY WITH KOMTRAX®

WHAT

- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX **continuously monitors and records** machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history **lowering owning and operating cost**

WHO

- KOMTRAX is **standard** equipment on all Komatsu construction products

WHEN

- Know when your machines are **running or idling** and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to **know when maintenance is due** and help you plan for future maintenance needs

WHERE

- KOMTRAX data **can be accessed virtually anywhere** through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications

WHY

- Knowledge is power - **make informed decisions** to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- **Take control of your equipment** - any time, anywhere

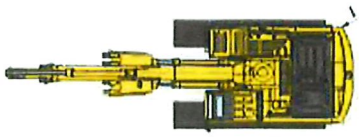
KOMTRAX®
For construction and compact equipment.

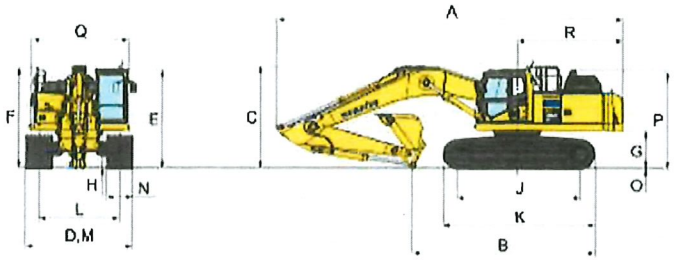
KOMTRAX Plus®
For production and mining class machines.

DIMENSIONS

	Arm Length	3185 mm	10'5"	4020 mm	13'2"
A	Overall length	11145 mm	36'7"	11170 mm	36'8"
B	Length on ground (transport)	5935 mm	19'6"	5475 mm	18'0"
C	Overall height (to top of boom)*	3285 mm	10'9"	3760 mm	12'4"
D	Overall width	3440 mm	11'3"		
E	Overall height (to top of cab)*	3160 mm	10'4"		
F	Overall height (to top of handrail)*	3255 mm	10'8"		
G	Ground clearance, counterweight	1185 mm	3'11"		
H	Ground clearance, minimum	498 mm	1'8"		
I	Tail swing radius	3445 mm	11'4"		
J	Track length on ground	4030 mm	13'3"		
K	Track length	4955 mm	16'3"		
L	Track gauge	2590 mm	8'6"		
M	Width of crawler 700 mm 28" shoe	3290 mm	10'7"		
	Width of crawler 800 mm 31.5" shoe	3390 mm	11'1"		
	Width of crawler 850 mm 33.5" shoe	3440 mm	11'3"		
N	Shoe width	850 mm	33.5"		
O	Grouser height	36 mm	1.4"		
P	Machine height to top of engine cover	3135 mm	10'3"		
Q	Machine upper width**	3145 mm	10'4"		
R	Distance, swing center to rear end	3405 mm	11'2"		

*: Including grouser height **: Including handrail





BACKHOE BUCKET, ARM AND BOOM COMBINATION

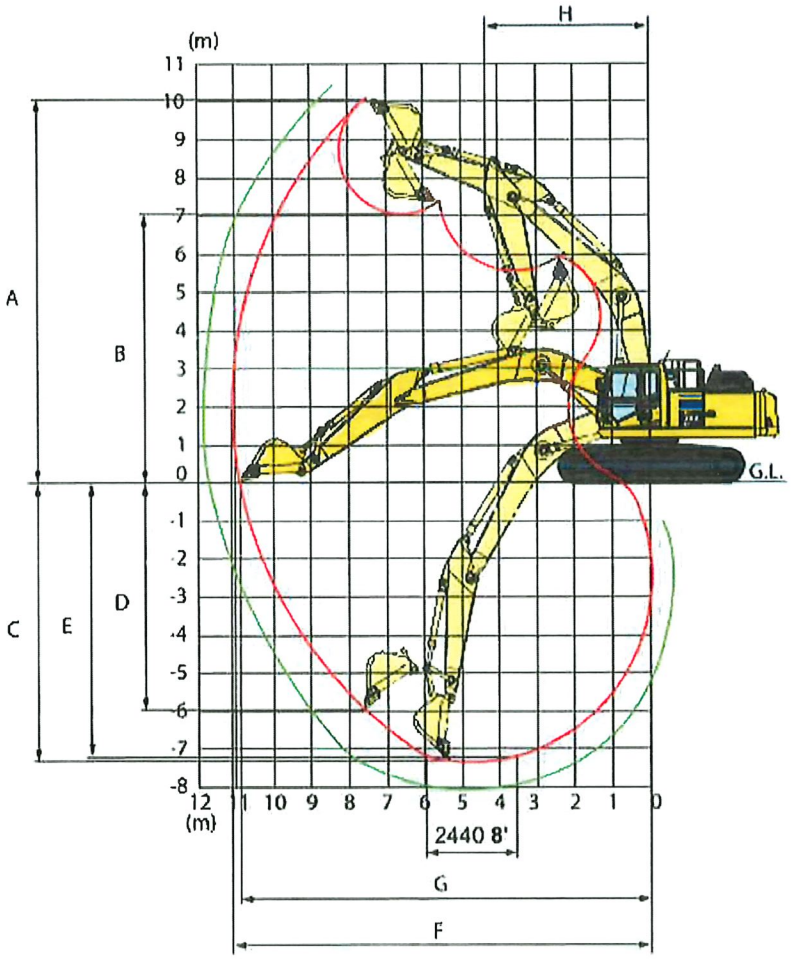
Bucket Type	Bucket Capacity		Teeth	Width		Weight		Tip Radius		6.5 m (21'3") Boom 3.2 m (10'5")	6.5 m (21'3") Boom 4.0 m (13'2")
Komatsu IL	0.93 m³	1.21 yd³	4	762 mm	30"	1097 kg	2418 lb	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1198 kg	2641 lb	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1067 mm	42"	1325 kg	2921 lb	1674 mm	65.9"	●	●
	1.70 m³	2.22 yd³	5	1219 mm	48"	1426 kg	3144 lb	1674 mm	65.9"	●	○
	1.96 m³	2.56 yd³	6	1372 mm	54"	1554 kg	3425 lb	1674 mm	65.9"	○	□
Komatsu HP	0.68 m³	0.89 yd³	3	610 mm	24"	1022 kg	2254 lb	1674 mm	65.9"	●	●
	0.93 m³	1.21 yd³	4	762 mm	30"	1178 kg	2598 lb	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1358 kg	2993 lb	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1067 mm	42"	1439 kg	3173 lb	1674 mm	65.9"	●	●
	1.70 m³	2.22 yd³	5	1219 mm	48"	1555 kg	3429 lb	1674 mm	65.9"	●	□
	1.96 m³	2.56 yd³	6	1372 mm	54"	1701 kg	3750 lb	1674 mm	65.9"	□	⊙
Komatsu HPS	0.68 m³	0.89 yd³	3	610 mm	24"	1112 kg	2451 lb	1674 mm	65.9"	●	●
	0.93 m³	1.21 yd³	4	762 mm	30"	1294 kg	2853 lb	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1437 kg	3167 lb	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1067 mm	42"	1607 kg	3543 lb	1674 mm	65.9"	●	○
	1.70 m³	2.22 yd³	5	1219 mm	48"	1750 kg	3857 lb	1674 mm	65.9"	○	□
	1.96 m³	2.56 yd³	6	1372 mm	54"	1921 kg	4236 lb	1674 mm	65.9"	□	⊙
Komatsu HPX	0.68 m³	0.89 yd³	3	610 mm	24"	1239 kg	2731 lb	1674 mm	65.9"	●	●
	0.93 m³	1.21 yd³	4	762 mm	30"	1421 kg	3133 lb	1674 mm	65.9"	●	●
	1.18 m³	1.54 yd³	4	914 mm	36"	1564 kg	3447 lb	1674 mm	65.9"	●	●
	1.44 m³	1.88 yd³	5	1067 mm	42"	1734 kg	3823 lb	1674 mm	65.9"	●	○
	1.70 m³	2.22 yd³	5	1219 mm	48"	1877 kg	4137 lb	1674 mm	65.9"	○	□
	1.96 m³	2.56 yd³	6	1372 mm	54"	2048 kg	4516 lb	1674 mm	65.9"	□	⊙

● - Used with material weights up to 3,500 lb/yd³ - Quarry/rock/high abrasion applications
□ - Used with material weights up to 2,500 lb/yd³ - General construction
○ - Used with material weights up to 3,000 lb/yd³ – Tough digging applications
⊙ - Used with material weights up to 2,000 lb/yd³ - Light materials applications
X - Not useable

Komatsu recommends the use of buckets sized to machine capacity. Buckets listed in the table above are sized appropriate to the specified material densities. Buckets exceeding recommended sizes may result in reduced performance

SPECIFICATIONS

WORKING RANGE



	Arm Length	3165 mm	10'5"	4020 mm	13'2"
A	Max. digging height	10210 mm	33'6"	10550 mm	34'7"
B	Max. dumping height	7110 mm	23'4"	7490 mm	24'7"
C	Max. digging depth	7360 mm	24'3"	8180 mm	26'10"
D	Max. vertical wall digging depth	6480 mm	21'3"	7280 mm	23'11"
E	Max. digging depth for 8' level bottom	7180 mm	23'7"	8045 mm	26'5"
F	Max. digging reach	11100 mm	36'6"	11900 mm	39'1"
G	Max. digging reach at ground level	10920 mm	35'10"	11730 mm	38'6"
H	Min. swing radius	4310 mm	14'2"	4320 mm	14'2"
SAE rating	Bucket digging force at power max.	200 kN 20400 kg / 44,970 lb		200 kN 20400 kg / 44,970 lb	
SAE rating	Arm crowd force at power max.	165 kN 16800 kg / 37,040 lb		139 kN 14200 kg / 31,310 lb	
ISO rating	Bucket digging force at power max.	228 kN 23200 kg / 51,160 lb		227 kN 23100 kg / 50,930 lb	
ISO rating	Arm crowd force at power max.	171 kN 17400 kg / 38,360 lb		144 kN 14700 kg / 32,410 lb	

LIFT CAPACITIES

LIFTING CAPACITY WITH LIFTING MODE

A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊠ : Rating at maximum reach

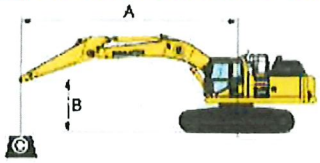
Conditions :
- 6500 mm **21' 3"** one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 3185 mm 10'5" **Shoes: 700 mm 28"** **Unit: kg lb**

A / B	3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		⊠ MAX	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m											* 7250	* 7250
25'											* **15980**	* **15980**
6.1 m							* 8890	7530			* 7050	6390
20'							* **19580**	**16800**			* **15540**	**14080**
4.6 m					* 10740	10170	* 9370	7370			* 7100	2690
15'					* **23670**	**22420**	* **20850**	**16240**			* **15950**	**5930**
3.0 m			* 16210	14500	* 12090	9710	* 10030	7140	8160	5520	* 7380	5340
10'			* **35730**	**31980**	* **26650**	**21400**	* **22110**	**15740**	**17980**	**12160**	* **16270**	**11770**
1.5 m			* 18180	13690	* 13220	9290	10410	6910	8050	5410	7740	5210
5'			* **40070**	**30180**	* **29140**	**20480**	**22950**	**15230**	**17740**	**11920**	**17060**	**11480**
0 m			* 18550	13330	* 13740	9010	10230	6750	7980	5340	7910	5300
0'			* **40890**	**29380**	* **30290**	**19860**	**22550**	**14880**	**17540**	**11770**	**17430**	**11680**
-1.5 m	* 13710	* 13710	* 17720	13260	* 13480	8900	10140	6670			8480	5660
-5'	* **30220**	* **30220**	* **39060**	**29230**	* **29710**	**19620**	**22350**	**14700**			**18690**	**12470**
-3.0 m	* 20540	* 20540	* 15850	13360	* 12300	8930	* 9440	6720			* 8870	6430
-10'	* **45280**	* **45280**	* **34940**	**29450**	* **27110**	**19680**	* **20810**	**14810**			* **19550**	**14170**
-4.6 m	* 15670	* 15670	* 12560	* 12560	* 9590	9130					* 8350	8170
-15'	* **34540**	* **34540**	* **27690**	* **27690**	* **21140**	**20120**					* **18400**	**18010**

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location. use of any attachment point in a different location to handle objects could affect excavator lift performance.

LIFTING CAPACITY WITH LIFTING MODE



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊠ : Rating at maximum reach

Conditions :
- 6500 mm **21' 3"** one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 3185 mm 10'5" **Shoes: 800 mm 31.5"** **Unit: kg lb**

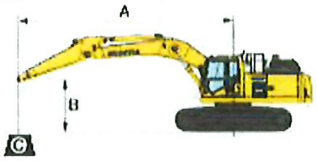
A / B	3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		⊠ MAX	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m											* 7250	* 7250
25'											* **15900**	* **15900**
6.1 m							* 8690	7600			* 7050	6440
20'							* **19600**	**16700**			* **15500**	**14200**
4.6 m					* 10740	10260	* 9370	7430			* 7100	5750
15'					* **23500**	**22600**	* **20600**	**16300**			* **15600**	**12600**
3.0 m			* 16210	14630	* 12090	9790	* 10030	7200	8240	5570	* 7380	5390
10'			* **35700**	**32200**	* **26600**	**21500**	* **22100**	**15800**	**18100**	**12200**	* **16200**	**11800**
1.5 m			* 18180	13820	* 13220	9370	10510	6980	8120	5460	7820	5260
5'			* **40000**	**30400**	* **29100**	**20600**	**23100**	**15300**	**17900**	**12000**	**17200**	**11600**
0 m			* 18550	13460	* 13740	9100	10330	6810	8040	5390	7990	5360
0'			* **40900**	**29600**	* **30200**	**20000**	**22700**	**15000**	**17700**	**11800**	**17600**	**11600**
-1.5 m	* 13710	* 13710	* 17720	13380	* 13480	8980	10240	6730			8570	5710
-5'	* **30200**	* **30200**	* **39000**	**29500**	* **29700**	**19800**	**22500**	**14800**			**18800**	**12600**
-3.0 m	* 20540	* 20540	* 15850	13490	* 12300	9010	* 9440	6780			* 8870	6490
-10'	* **45200**	* **45200**	* **34900**	**29700**	* **27100**	**19800**	* **20800**	**14800**			* **19500**	**14300**
-4.6 m	* 15670	* 15670	* 12560	* 12560	* 9590	9210					* 8350	8250
-15'	* **34500**	* **34500**	* **27600**	* **27600**	* **21100**	**20300**					* **18400**	**18100**

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location. use of any attachment point in a different location to handle objects could affect excavator lift performance.

LIFT CAPACITIES

PC360LC-11

LIFTING CAPACITY WITH LIFTING MODE



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗ : Rating at maximum reach

Conditions :
- 6500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 3185 mm 10'5" | Shoes: 850 mm 33.5" | Unit: kg lb

A / B	3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		⊗ MAX	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m											* 7250	* 7250
25'											* 15900	* 15900
6.1 m							* 8890	7630			* 7050	6470
20'							* 19600	16800			* 15500	14200
4.6 m					* 10740	10300	* 9370	7460			* 7100	5770
15'					* 23600	22700	* 20600	16400			* 15600	12700
3.0 m			* 16210	14690	* 12090	9830	* 10030	7230	8280	5590	* 7380	5410
10'			* 35700	32300	* 26600	21600	* 22100	15900	18200	12300	* 16200	11900
1.5 m			* 18180	13880	* 13220	9410	10560	7010	8160	5490	7850	5290
5'			* 40000	30600	* 29100	20700	23200	15400	18000	12100	17300	11600
0 m			* 18550	13520	* 13740	9140	10380	6840	8080	5410	8030	5380
0'			* 40900	29800	* 30200	20100	22800	15000	17800	11900	17700	11800
-1.5 m	* 13710	* 13710	* 17720	13450	* 13480	9020	10290	6770			8610	5740
-5'	* 30200	* 30200	* 39000	29600	* 29700	19900	22700	14900			18900	12600
-3.0 m	* 20540	* 20540	* 15850	13550	* 12300	9050	* 9440	6810			* 8870	6520
-10'	* 45200	* 45200	* 34900	29800	* 27100	19900	* 20800	15000			* 19500	14300
-4.6 m	* 15670	* 15670	* 12560	* 12560	* 9590	9260					* 8350	8290
-15'	* 34500	* 34500	* 27600	* 27600	* 21100	20400					* 18400	18200

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

LIFTING CAPACITY WITH LIFTING MODE

A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗ : Rating at maximum reach

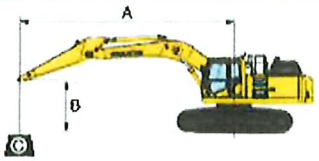
Conditions :
- 6500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

Arm: 4020 mm 13'2" | Shoes: 700 mm 28" | Unit: kg lb

A / B	3.0 m 10'		4.6 m 15'		6.1 m 20'		7.6 m 25'		9.1 m 30'		⊗ MAX	
	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.6 m							* 7750	7710			* 5610	* 5610
25'							* 17080	16890			* 12360	* 12360
6.1 m							* 7950	7620	* 6550	5690	* 5460	5460
20'							* 17520	16790	* 14440	12540	* 12030	12030
4.6 m							* 8520	7410	* 7870	5610	* 5470	4940
15'							* 18780	16330	* 17350	12360	* 12050	10890
3.0 m			* 14340	* 14340	* 11020	9790	* 9280	7130	8130	5470	* 5640	4650
10'			* 31610	* 31610	* 24290	21580	* 20450	15710	17920	12050	* 12430	10250
1.5 m			* 16890	13770	* 12370	9260	* 10010	6840	7970	5320	* 5950	4540
5'			* 37230	30350	* 27270	20410	* 22060	15070	17570	11720	* 13110	10000
0 m	* 8320	* 8320	* 18090	13140	* 13230	8870	10100	6610	7830	5190	* 6480	4600
0'	* 18340	* 18340	* 39880	28960	* 29160	19550	22260	14570	17260	11440	* 14280	10140
-1.5 m	* 12420	* 12420	* 17980	12900	* 13400	8660	9850	6470	7760	5130	7290	4840
-5'	* 27380	* 27380	* 39630	28430	* 29540	19090	21930	14260	17100	11300	16070	10670
-3.0 m	* 17840	* 17840	* 16780	12900	* 12760	8610	9920	6440			* 8040	5360
-10'	* 39330	* 39330	* 36890	28430	* 28130	18980	21880	14190			* 17720	11810
-4.6 m	* 19190	* 19190	* 14360	13100	* 11040	8730	* 8190	6570			* 7850	6420
-15'	* 42300	* 42300	* 31650	28880	* 24330	19240	* 18050	14480			* 17300	14150
-6.1 m	* 12720	* 12720	* 9970	* 9970	* 7010	* 7010					* 6940	* *6940
-20'	* 28040	* 28040	* 21980	* 21980	* 15450	* 15450					* 15300	* *15300

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

LIFTING CAPACITY WITH LIFTING MODE



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗: Rating at maximum reach

Conditions :
- 6500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

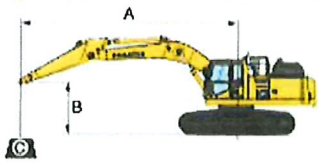
⊗

Arm: 4020 mm 13'2" **Shoes:** 800 mm 31.5" **Unit:** kg lb

A / B	3.0 m 10' Cf	3.0 m 10' Cs	4.6 m 15' Cf	4.6 m 15' Cs	6.1 m 20' Cf	6.1 m 20' Cs	7.6 m 25' Cf	7.6 m 25' Cs	9.1 m 30' Cf	9.1 m 30' Cs	MAX Cf	MAX Cs
7.6 m							* 7750	* 7750			* 5610	* 5610
25'							* 17000	* 17000			* 12300	* 12300
6.1 m							* 7950	7680	* 6550	5740	* 5460	* 5460
20'							* 17500	16900	* 14400	12600	* 12000	* 12000
4.6 m							* 8520	7470	* 7870	5660	* 5470	4980
15'							* 18700	16400	* 17300	12400	* 12000	10900
3.0 m			* 14340	* 14340	* 11020	9870	* 9280	7190	8210	5520	* 5640	4700
10'			* 31600	* 31600	* 24300	21700	* 20400	15800	18100	12100	* 12400	10300
1.5 m			* 16890	13900	* 12370	9350	* 10010	6900	8040	5370	* 5950	4590
5'			* 37200	30600	* 27200	20600	* 22000	15200	17700	11800	* 13100	10100
0 m	* 8320	* 8320	* 18090	13270	* 13230	8960	10200	6670	7910	5240	* 6480	4640
0'	* 18300	* 18300	* 39800	29200	* 29100	19700	22500	14700	17400	11500	* 14200	10200
-1.5 m	* 12420	12420	* 17980	13030	* 13400	8740	10050	6530	7840	5180	* 7330	4890
-5'	* 27300	27300	* 39600	28700	* 29500	19200	22100	14400	17200	11400	* 16100	10700
-3.0 m	* 17840	* 17840	* 16780	13030	* 12760	8700	* 10020	6510			* 8040	5410
-10'	* 39300	* 39300	* 37000	28700	* 28100	19100	* 22000	14300			* 17700	11900
-4.6 m	* 19190	* 19190	* 14360	13230	* 11040	8810	* 8190	6640			* 7850	6480
-15'	* 42300	* 42300	* 31600	29100	* 24300	19400	* 18000	14600			* 17300	14300

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

LIFTING CAPACITY WITH LIFTING MODE



A: Reach from swing center
B: Bucket hook height
C: Lifting capacity
Cf: Rating over front
Cs: Rating over side
⊗: Rating at maximum reach

Conditions :
- 6500 mm 21' 3" one-piece boom
- Bucket: None
- Lifting mode: On

⊗

Arm: 4020 mm 13'2" **Shoes:** 850 mm 33.5" **Unit:** kg lb

A / B	3.0 m 10' Cf	3.0 m 10' Cs	4.6 m 15' Cf	4.6 m 15' Cs	6.1 m 20' Cf	6.1 m 20' Cs	7.6 m 25' Cf	7.6 m 25' Cs	9.1 m 30' Cf	9.1 m 30' Cs	MAX Cf	MAX Cs
7.6 m							* 7750	* 7750			* 5610	* 5610
25'							* 17000	* 17000			* 12300	* 12300
6.1 m							* 7950	7720	* 6550	5770	* 5460	* 5460
20'							* 17500	17000	* 14400	12700	* 12000	* 12000
4.6 m							* 8520	7500	* 7870	5690	* 5470	5010
15'							* 18700	16500	* 17300	12500	* 12000	11000
3.0 m			* 14340	* 14340	* 11020	9910	* 9280	7220	* 8220	5550	* 5640	4720
10'			* 31600	* 31600	* 24300	21800	* 20400	15900	* 18100	12200	* 12400	10400
1.5 m			* 16890	13960	* 12370	9390	* 10010	6940	8080	5400	* 5950	4610
5'			* 37200	30700	* 27200	20700	* 22000	15300	17800	11900	* 13100	10100
0 m	* 8320	* 8320	* 18090	13330	* 13230	9000	10250	6710	7950	5270	* 6480	4660
0'	* 18300	* 18300	* 39800	29400	* 29100	19800	22600	14700	17500	11600	* 14200	10200
-1.5 m	* 12420	* 12420	* 17980	13090	* 13400	8790	10100	6570	7880	5200	* 7330	4910
-5'	* 27300	* 27300	* 39600	28800	* 29600	19300	22200	14400	17300	11400	* 16100	10800
-3.0 m	* 17840	* 17840	* 16780	13090	* 12760	8740	10020	6540			* 8040	5440
-10'	* 39300	* 39300	* 37000	28800	* 28100	19200	22000	14400			* 17700	11900
-4.6 m	* 19190	* 19190	* 14360	13290	* 11040	8860	8190	6670			* 7850	6520
-15'	* 42300	* 42300	* 31600	29300	* 24300	19500	18000	14700			* 17300	14300

*Asterisk indicates load is limited by hydraulic capacity rather than tipping. Ratings are based on ISO standard No. 10567. Rated load capacity does not exceed 87% of hydraulic lift capacity or 75% of tipping load. Total weight of bucket and/or installed attachments must be deducted from the capacities shown above. Lift capacity chart is based on machine located on a solid, level and uniform surface. Load ratings are at the arm bucket pin location, use of any attachment point in a different location to handle objects could affect excavator lift performance.

NOTES

NOTES

PC360LC-11

STANDARD EQUIPMENT

- 3 speed travel with auto shift
- Alternator, 90 Ampere, 24V
- AM/FM radio
- Arm holding valve
- Automatic engine warm-up system
- Automatic climate control/air conditioner/heater/defroster
- Auto idle
- Auto idle shut down, programmable
- Auxiliary input (3.5mm jack)
- Batteries, large capacity (2 x 12V)
- Battery master disconnect switch
- Belt-driven suction fan
- Boom holding valves
- Carrier rollers, (2 each side)
- Converter (2) x 12V
- Counterweight, 6920 kg **15,255 lb**
- Dry type air cleaner, double element
- Electric fuel priming pump
- Electric horn
- Engine: Komatsu SAA6D107E-6
- Engine coolant to -25°C **-13°F**
- EMMS monitoring system
- Engine overheat prevention system
- Extended work equipment grease interval
- Fan guard structure
- Fuel system pre-filter 10 micron
- Grease sealed track chain
- High back air suspension seat, with heat
- Hydraulic track adjusters
- KOMTRAX® Level 5.0
- Large LCD color monitor, high resolution
- Lock lever
- Mirrors, (LH and RH)
- Operator Protective Top Guard (OPG) Level 1
- Operator identification system
- Pattern change valve (ISO to BH control)
- Power maximizing system
- PPC hydraulic control system
- Pump/engine room partition cover
- Radiator and oil cooler dustproof net
- Rear reflectors
- Rearview monitoring system (1 camera)
- Revolving frame deck guard
- Revolving frame undercovers
- ROPS cab (ISO12117-2)
- Seat belt indicator
- Seat belt, retractable, 76mm **3"**
- Secondary engine shutoff switch
- Service valve
- Skylight
- Slip resistant foot plates
- Starter motor, 11.0kW/24V x 1
- Thermal and fan guards
- Track frame swivel guard
- Track roller guards, center section
- Track rollers, 8 (each side)
- Track shoes, triple grouser, 800 mm **31.5"**
- Travel alarm
- Two boom mode settings
- Working lights, 2 (boom and RH front)
- Working mode selection system

OPTIONAL EQUIPMENT

- Arms
  - 3185 mm **10'5"** arm assembly
  - 3185 mm **10'5"** arm assembly with piping
  - 4020 mm **13'2"** arm assembly
  - 4020 mm **13'2"** arm assembly with piping
- Booms
  - 6500 mm **21'3"** HD boom assembly
  - 6500 mm **21'3"** HD boom assembly with piping
- Cab guards
  - Lower front window guard
  - Full front guard, OPG Level 1
  - Full front guard, OPG Level 2
  - Bolt-on top guard, OPG Level 2
- Counterweight, 7400 kg **16,315 lb** with revolving frame reinforcement for use with super long fronts only
- High pressure in-line hydraulic filters
- Hydraulic control unit, 1 actuator
- Proportional control handles
- Rain visor
- Revolving frame undercovers, heavy duty
- Revolving frame undercovers, severe duty
- Sun visor
- Straight travel pedal
- Track roller guards, full length
- Track shoes, triple grouser, 700 mm **28"**
- Track shoes, triple grouser, 850 mm **33.5"**
- Track shoes, single grouser, 800 mm **31.5"**
- Working lights, front, two additional cab mounted

ATTACHMENT OPTIONS

- Grade control systems
- Hydraulic couplers
- Hydraulic kits, field installed
- Load hold, anti-burst valves
- Material handler front
- Super long fronts
- PSM thumbs
- Rockland thumbs
- Vandalism protection guards with storage box

For a complete list of available attachments, please contact your local Komatsu distributor.

MIX
Paper from responsible sources
FSC® C031303

AESS874-05

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KOMATSU®

Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.

www.komatsuamerica.com

KOMATSU®

WA200-8

Tier 4 Final Engine

WA200

WHEEL LOADER

Photos may include optional equipment

NET HORSEPOWER
126 HP @ 2000 rpm
94 kW @ 2000 rpm

OPERATING WEIGHT
25,827– 26,489 lb
11715 – 12015 kg

BUCKET CAPACITY
2.6 – 3.1 yd^3
2.0 – 2.4 m^3

#3 $10 8

WALK-AROUND

WA200-8

Photos may include optional equipment.

NET HORSEPOWER
126 HP @ 2000 rpm
94 kW @ 2000 rpm

OPERATING WEIGHT
25,827– 26,489 lb
11715 – 12015 kg

BUCKET CAPACITY
2.6 – 3.1 yd^3
2.0 – 2.4 m^3

KOMATSU CARE®

AGILITY AND PRODUCTIVITY

Proven, Fourth Generation Hydrostatic Transmission:
- Quick Acceleration
- Dynamic Braking
- Variable Traction Control System
- Creeping Mode

Versatile Parallel Z-bar (PZ) linkage:
- Parallel lift for handling pallets or pipe
- Large breakout force for earth work

A powerful Komatsu SAA4D107E-3 engine provides a net output of 94 kW **126 HP** with up to four percent improved fuel consumption. This engine is EPA Tier 4 Final emissions certified.

New Variable Geometry Turbocharger (VGT) provides optimum air flow under all speed and load conditions. This Tier 4 Final version has improved performance.

Komatsu Diesel Oxidation Catalyst (KDOC) and new Selective Catalytic Reduction (SCR) systems reduce hydrocarbons, carbon monoxide, and NOx without interfering with daily operation.

Increased cooling capacity
- Auto-reversing fan is standard
- Wider core coolers
- Cooling system volume increased by 7.5%

Fluid neutral or better
Combined fuel and DEF consumption is equal to or less than the WA200-7 fuel consumption.

New spacious cab provides the operator with improved comfort and visibility.

Multi-function mono lever with proportional control switch.

New high resolution monitor panel:
- Enhanced and intuitive on-board diagnostics
- Integrated with KOMTRAX® Level 5
- Integrated with Komatsu Tier 4 Final technology

New rearview monitoring system is standard.

New high capacity air suspension seat with heat is standard.

Battery disconnect switch allows a technician to disconnect the power supply before servicing the machine.

Energy saving guidance:
- Six operator guiding messages
- Enhanced ecology gauge

New Komatsu auto idle shutdown helps reduce idle time and operating costs.

The **KOMTRAX®** telematics system is standard on Komatsu equipment with no subscription fees throughout the life of the machine. Using wireless technology, **KOMTRAX®** transmits valuable information such as location, utilization, and maintenance records to a PC or smartphone app. Custom machine reports are provided for identifying machine efficiency and operating trends. **KOMTRAX®** also provides advanced machine troubleshooting capabilities by continuously monitoring machine health.

New operator identification system tracks machine operation for up to 100 operators.

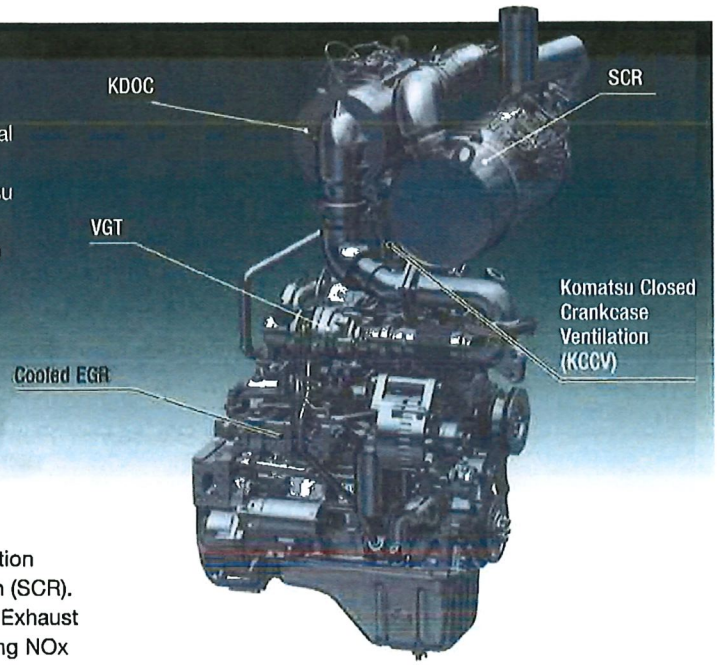
Swing-out cooler design allows access to service and clean the cooler assembly.

PRODUCTIVITY & ECOLOGY FEATURES

KOMATSU NEW ENGINE TECHNOLOGIES

New Tier 4 Final Engine

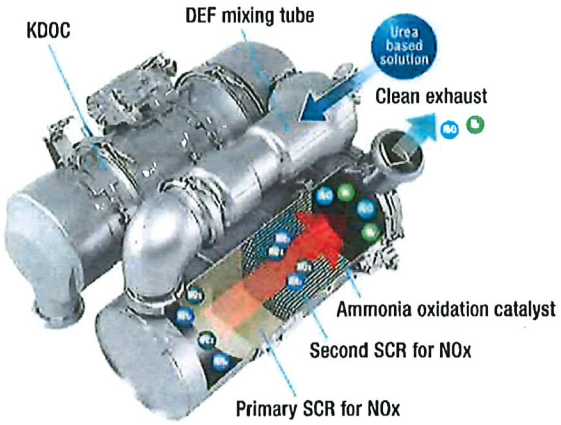
The Komatsu SAA4D107E-3 engine is EPA Tier 4 Final emissions certified, reduces fuel consumption, and provides exceptional performance. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces nitrogen oxides (NOx) compared to Tier 4 interim levels.



Technologies Applied to New Engine

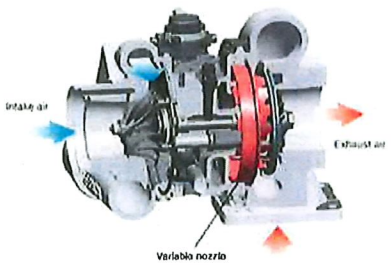
Heavy-Duty After Treatment System

This new system combines Komatsu Diesel Oxidation Catalyst (KDOC) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into non-toxic water (H_2O) and nitrogen gas (N_2).



Variable Geometry Turbocharger (VGT) system

The VGT provides optimal air flow under all engine speed and load conditions. The upgraded version provides better exhaust temperature management.



Heavy-Duty Cooled Exhaust Gas Recirculation (EGR) System

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby reducing NOx emissions. EGR gas flow is lower for Tier 4 Final with the addition of SCR technology. The system drastically reduces NOx while reducing fuel consumption.

Advanced Electronic Control System

An improved electronic control system more effectively manages engine parameters such as airflow rate, fuel injection parameters, and after treatment function. The control system also provides enhanced diagnostics through the monitor panel. Additionally, managing information via KOMTRAX helps customers track required maintenance.

Heavy-Duty High-Pressure Common Rail (HPCR) fuel injection system

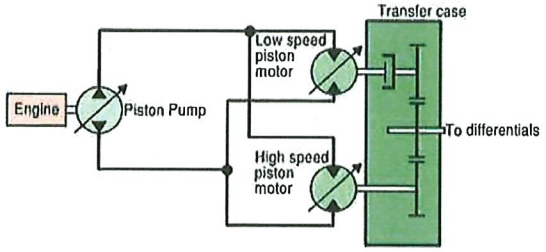
The system is specifically designed to achieve the optimal injection of fuel for near- complete combustion, which helps reduce Particulate Matter (PM) emissions.

Hydrostatic Transmission (HST)

The HST provides quick travel response and aggressive drive into the pile. Full auto-shifting eliminates any gear shifting and kick-down operation to allow the operator to concentrate on digging and loading. The HST also acts as a dynamic brake to slow the loader. This dramatically extends the life of the wet disc brakes.

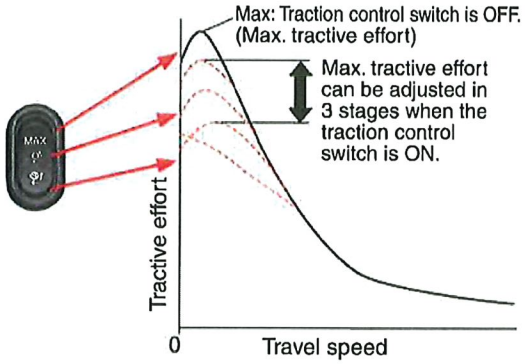
1-Pump, 2 Motor System

The 1-pump, 2 motor system allows for high-efficiency and high tractive effort. Engine power is transmitted hydraulically to a transfer case, then mechanically out to the differentials and the four driving wheels.



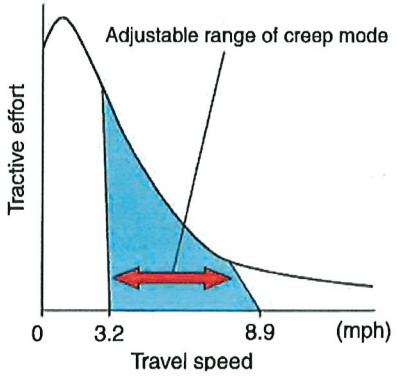
Variable Traction Control System

The variable speed control system is designed to adjust the tractive effort for each working condition. S-mode reduces tire spin in slippery or snowy conditions. Tractive effort can be adjusted in three stages when traction control switch is ON. Max traction provides the full, 100%, tractive effort.



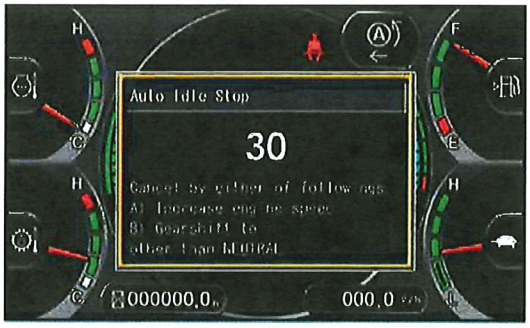
Creep Mode

Creep mode limits the travel speed in 1st speed range, while still allowing for full hydraulic flow.



Komatsu Auto Idle Shutdown

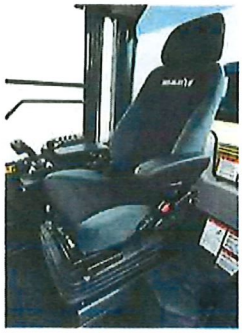
In order to reduce unwanted idle time, Komatsu offers Komatsu auto idle shutdown. This function will shut the engine off and apply the parking brake and hydraulic lock after a preset idle time limit. This time limit can be set by the operator or service technician and may range from three to 60 minutes. It can also be deactivated by the operator.



OPERATOR ENVIRONMENT

New Operator Seat

A new standard, heated, air-suspension seat provides enhanced support on rough roads and dampens machine vibrations, providing a more comfortable ride for the operator. The angle of the armrest is fully adjustable for optimum operator comfort. A secondary F-N-R switch is incorporated into the standard multi-function mono lever.



Tiltable / Telescopic Steering Wheel

The operator can tilt and telescope the steering wheel to allow maximum comfort and control. The two-spoke steering wheel allows maximum visibility of the monitor panel and the forward work environment.

Low Noise Design

Operator's ear noise level: 68 dB(A)*
Dynamic noise level (outside): 104 dB(A)**

The large ROPS/FOPS cab is mounted with Komatsu's unique viscous mounts. The low-noise engine, hydraulically-driven fan, and hydraulic pumps are mounted with rubber cushions, and the cab sealing is improved to provide a quiet, low-vibration, comfortable operating environment.

* *ISO 6396: 2008*
** *ISO 6395: 2008*

Increased Cab Storage Area

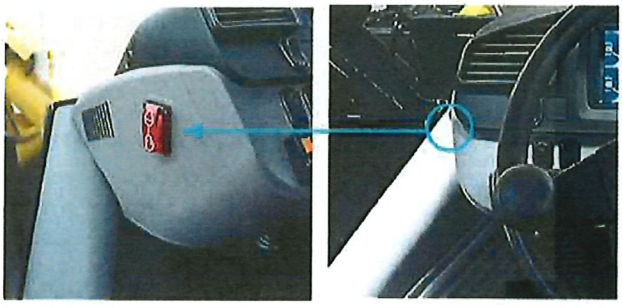
The WA200-8 cab features a heated/cooled storage compartment on the right side of the cab to allow the operator to store items such as a beverage or lunch.

Standard Rearview Monitoring System

The dedicated, full-color monitor on the right side of the cab provides the operator with a rearview from the machine. This monitor can be always on or only on when the loader shifts into reverse. Guidelines provide the operator with visual cues for the width of the loader.

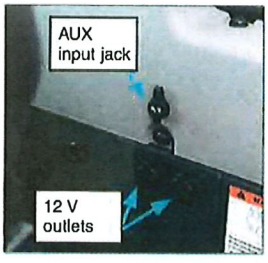
Secondary Engine Shutdown Switch

The engine stop switch enables machine shutdown when accessing the key switch is not possible.

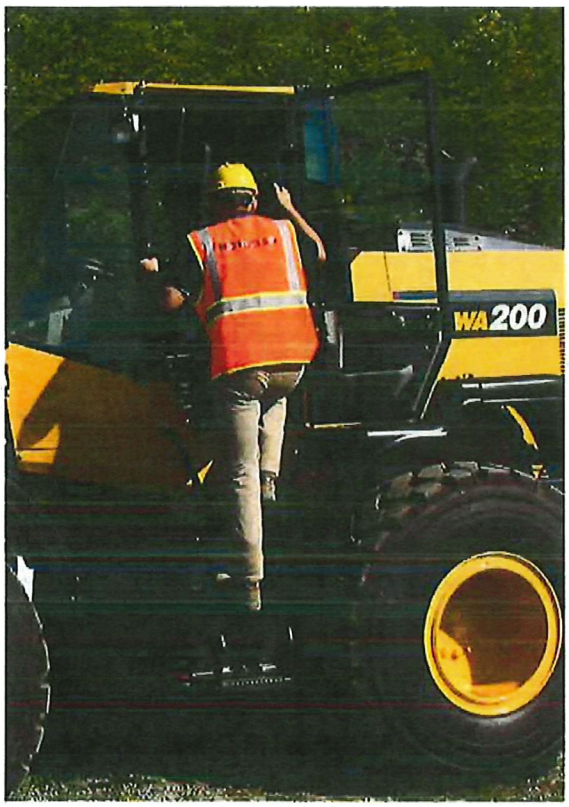


Auxiliary Input (MP3 Jack) 12 V Outlets

An Aux input for audio devices is standard, as well as two 12 volt outlets. These are all located on the rear wall of the cab.



WORKING ENVIRONMENT



Easy Entry and Exit

The WA200-8 has an inclined ladder with wide steps and well-placed hand holds to ease entry and exit from the cab. The door latch can be reached from ground level to ease machine access.

Electronically Controlled Suspension System

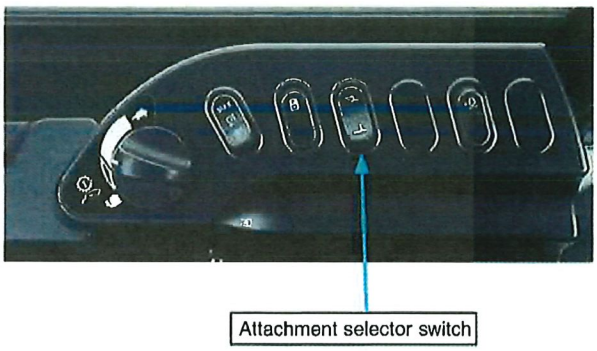
The standard Electronically Controlled Suspension System or ride control system uses an accumulator, which absorbs some of the shock in the boom arm, giving the operator a much smoother ride. This reduces operator fatigue and reduces material spillage during load and carry operations. Ride control is speed sensitive and the activation speed can be adjusted in the monitor panel.

Multi-Function Mono Lever

The multi-function mono lever with EPC control for 3rd spool is standard. It includes a forward-neutral-reverse switch for quick and easy travel. Third spool attachments can be set to continual or proportional control via the monitor panel. This allows the operator to control the boom, bucket and attachment, all with a single lever.

Attachment Selector Switch

Coupler equipped machines, which use buckets and forks, require a different flat level setting when switching between attachments. The attachment selector switch found in coupler equipped machines tells the loader which flat level to use.



INFORMATION & COMMUNICATION TECHNOLOGY

New High Resolution LCD Monitor Panel

The new seven inch color LCD monitor panel displays operational information, ecology guidance and maintenance records. Information such as traction mode, coolant temp, oil and fuel levels are easy to read and help keep the operator informed of the machine's settings and conditions.

Machine monitor

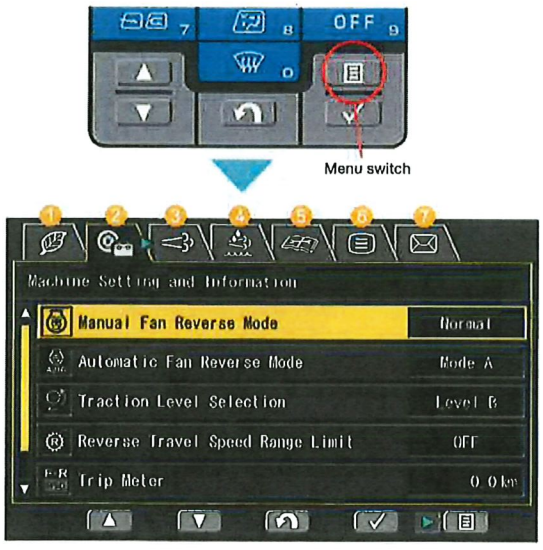
1. LCD unit
2. LED unit
3. Engine tachometer
4. Speedometer
5. Ecology gauge
6. Air conditioner display
7. Traction level
8. Engine coolant temperature gauge
9. Fuel gauge
10. HST oil temperature gauge
11. Variable speed display
12. Message pilot lamp
13. Pilot lamps
14. DEF level gauge

Switch panel

1. Air conditioner switches / Numeral key pad
2. Function switches

Visual user menu

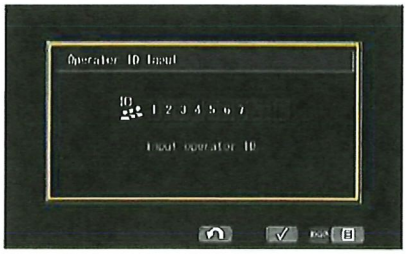
Pressing the menu button on the switch panel accesses the user-menu screen. The menus are grouped by function, with easy-to-understand, intuitive icons for easier machine operation.



1. Energy saving guidance
2. Machine settings
3. Aftertreatment devices regeneration
4. SCR information
5. Maintenance
6. Monitor setting
7. Mail check

Operator Identification function

An operator identification (ID) code can be set for each operator, and used to manage operation information of individual machines through KOMTRAX. Data sent from KOMTRAX can be used to analyze operation status by operator job, as well as by machine.



Monitor Panel with troubleshooting function minimizes downtime

Various meters, gauges and warning functions are centrally arranged on the monitor panel. The monitor simplifies start-up inspection and warns the operator with a lamp and buzzer if any abnormalities occur. Warnings are indicated in four levels, which the operator must acknowledge and clear. Replacement times for oil and filters are also indicated.

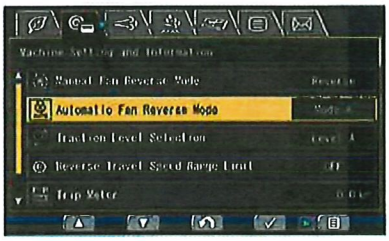
MAINTENANCE FEATURES

Side-opening Gull-wing Engine Doors

The large, gull-wing-type engine doors require minimal effort to open and close, thanks to gas assisted struts. The doors make access and daily maintenance easy. Large steps on the side of the frame also enhance accessibility.

Automatic Reversing Fan

The engine cooling fan is hydraulically driven. It can be set to reverse automatically during operation. Fan reverse mode and timing can be controlled through the monitor.

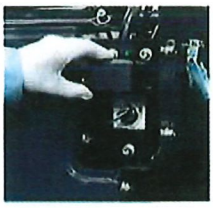


Swing-Out Type Cooling Fan and Wide Core Radiator

The cooling fan swings out for cleaning. The coolers feature wider fin spacing cooling to reduce clogging.

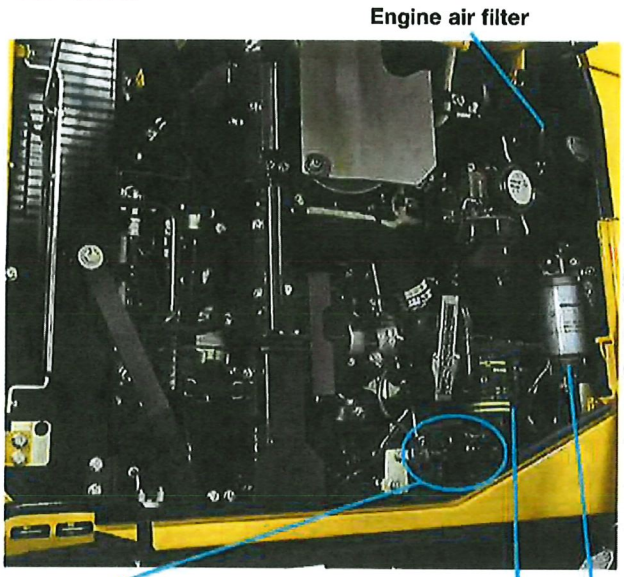
Battery Disconnect Switch

The battery disconnect switch is located on the right side of the machine. This can be used to disconnect power when performing service work on the machine.



Engine Compartment

The WA200-8 engine compartment is designed for easy serviceability. Placement of maintenance items, such as filters, dipsticks, and oil-fill locations are laid out for easy-to-reach access.



DEF Tank

The DEF tank is ground-level accessible on the left side of the machine near the cab door for easy access. The tank features a sight glass that helps prevent overfilling.

Cab Air Filter

The inside and outside air filters can be replaced easily without the need for tools. The outside filter is located behind a lockable door for security.


Inside air filter

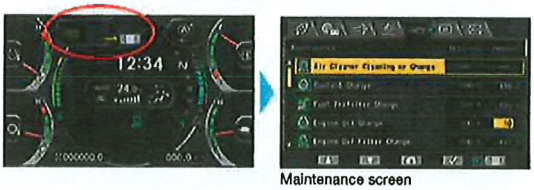

Outside air filter

Maintenance Information

"Maintenance time caution lamp" display

When the time before required maintenance is less than 30 hours*, the maintenance-time monitor appears. Pressing the menu switch displays the maintenance screen.

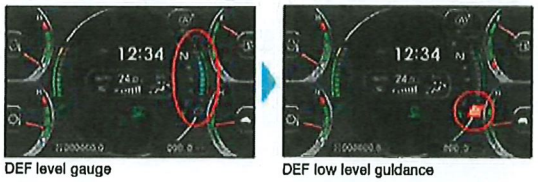
* : The setting can be changed within the range between 10 and 200 hours.



Maintenance screen

Supports DEF level and refill timing

The DEF level gauge is displayed continuously on the monitor panel. In addition, when the refill timing is reached, the DEF-low-level icon appears to alert the operator.



DEF level gauge
DEF low level guidance

Full Rear Fenders (Option)

The WA200-8 has a new rear fender option. The rear fenders open upward and use gas-assist struts, which require low lift force.

The fenders swing up with the gull-wing doors to give the technician easy access to the engine compartment. Mud flaps are also included on the rear fenders.

KOMATSU PARTS & SERVICE SUPPORT

KOMATSU CARE

Program Includes:
The WA200-8 comes standard with complimentary factory scheduled maintenance for the first 3 Years or 2,000 Hours, whichever comes first.*

Planned Maintenance Intervals at:
500/1000/1500/2000 hour intervals. (250 hr. initial interval for some products) Complimentary Maintenance Interval includes: Replacement of Oils & Fluid Filters with genuine Komatsu Parts, 50-Point inspection, Komatsu Oil & Wear Analysis Sampling (KOWA) / Travel & Mileage (distance set by distributor; additional charges may apply)

Benefits of Using Komatsu CARE

- Assurance of Proper Maintenance with OEM Parts & Service
- Increased Uptime & Efficiency
- Factory Certified Technicians Performing Work
- Cost of Ownership Savings
- Transferable Upon Resale

Complimentary SCR System Maintenance

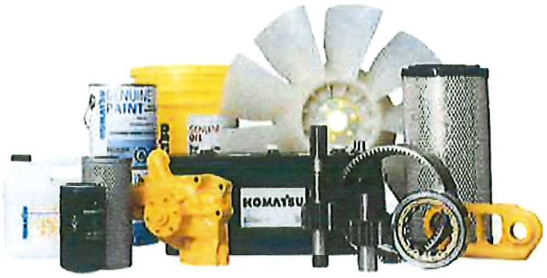
The WA200-8 also includes 2 factory recommended services of the Selective Catalytic Reduction (SCR) Diesel exhaust fluid (DEF) system during the first 5 years including: Factory recommended DEF tank flush and strainer cleaning at 4,500 hours and 9,000 hours.

Interval PM	i250	500	1000	1500	2000
CLEAN AC FRESH AND RECIRC AIR FILTERS	✓				
REPLACE HYDRAULIC OIL FILTER ELEMENT	✓				✓
REPLACE HST OIL FILTER	✓		✓		✓
KOWA SAMPLING – (Engine, Front Axle & Rear Axle, Hydraulics, Transfer case)	✓	✓	✓	✓	✓
CHECK AND CLEAN AIR CLEANER	✓	✓	✓	✓	✓
CHECK AND CLEAN FUEL BREATHER ELEMENT	✓	✓	✓	✓	✓
LUBRICATE REAR AXLE PIVOT PIN	✓	✓	✓	✓	✓
LUBRICATE WORK EQUIPMENT	✓	✓	✓	✓	✓
DRAIN SEDIMENT FROM FUEL TANK	✓	✓	✓	✓	✓
COMPLETE 50 POINT INSPECTION FORM; LEAVE PINK COPY WITH CUSTOMER OR IN CAB	✓	✓	✓	✓	✓
RESET MONITOR PANEL MAINTENANCE COUNTER FOR APPROPRIATE ITEMS	✓	✓	✓	✓	✓
CHANGE ENGINE OIL		✓	✓	✓	✓
REPLACE ENGINE OIL FILTER		✓	✓	✓	✓
REPLACE AC FRESH & RECIRC AIR FILTERS		✓	✓	✓	✓
REPLACE FUEL PRE-FILTER		✓	✓	✓	✓
REPLACE FUEL MAIN FILTER			✓		✓
CHANGE OIL IN TRANSFER CASE			✓		✓
CLEAN TRANSFER CASE STRAINER			✓		✓
CLEAN TRANSFER BREATHER			✓		✓
LUBRICATE CENTER HINGE PIN			✓		✓
CHANGE OIL IN HYDRAULIC TANK					✓
REPLACE HYDRAULIC TANK BREATHER ELEMENT					✓
CLEAN HYDRAULIC TANK STRAINER					✓
CHANGE FRONT AND REAR AXLE OIL					✓
CLEAN BRAKE CIRCUIT STRAINER					✓
REPLACE KCCV FILTER					✓
REPLACE HST DRAIN OIL FILTER					✓
REPLACE DEF PUMP FILTER					✓
REPLACE DEF TANK BREATHER					✓
FACTORY TRAINED TECHNICIAN LABOR	✓	✓	✓	✓	✓
2 SCR System Maintenance Services at 4,500 Hrs. and 9000 Hrs.					

* Certain exclusions and limitations apply. Refer to the customer certificate for complete program details and eligibility. Komatsu® and Komatsu Care® are registered trademarks of Komatsu Ltd.

Komatsu CARE® – Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs



Komatsu Parts Support

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction

Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

KOMTRAX EQUIPMENT MONITORING

GET THE WHOLE STORY WITH KOMTRAX®

WHAT

- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX **continuously monitors and records** machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history **lowering owning and operating cost**

WHEN

- Know when your machines are **running or idling** and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to **know when maintenance is due** and help you plan for future maintenance needs

WHERE

- KOMTRAX data **can be accessed virtually anywhere** through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications

WHY

- Knowledge is power - **make informed decisions** to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- **Take control of your equipment** - any time, anywhere

WHO

- KOMTRAX is **standard** equipment on all Komatsu construction products

KOMTRAX® For construction and compact equipment.

KOMTRAX Plus® For production and mining class machines.

SPECIFICATIONS

WA200-8

ENGINE

Model ..... Komatsu SAA4D107E-3*
Type ..... Water-cooled, 4-cycle
Aspiration ..... Variable geometry, turbo-charged, after-cooled, cooled EGR
Number of cylinders 4
Bore ..... 107 mm **4.21"**
Stroke ..... 124 mm **4.88"**
Piston displacement ..... 4.46 ltr **272 in³**
Governor ..... All-speed, electronic
Horsepower:
SAE J1995 ..... Gross 95.2 kW **128 HP**
ISO 9249 / SAE J1349 ..... Net 94 kW **126 HP**
Rated rpm ..... 2000 rpm
Fan drive method for radiator cooling ..... Hydraulic
Fuel system ..... Direct injection
Lubrication system:
Method ..... Gear pump, force-lubrication
Filter ..... Full-flow type
Air cleaner ..... Dry type with double elements and dust evacuator, plus dust indicator

*EPA Tier 4 Final emissions certified

TRANSMISSION

Transmission ..... Hydrostatic, 1 pump, 2 motors with speed range select

Travel speed	Forward	Reverse
1st	0 - 14.3 km/h **0 - 8.9 mph**	0 - 14.3 km/h **0 - 8.9 mph**
2nd	14.3 km/h **8.9 mph**	14.3 km/h **8.9 mph**
3rd	23.2 km/h **14.4 mph**	23.2 km/h **14.4 mph**
4th	38.0 km/h **23.6 mph**	38.0 km/h **23.6 mph**

Measured with 20.5-R25 tires

AXLES AND FINAL DRIVES

Drive system ..... Four-wheel drive
Front ..... Fixed, semi-floating
Rear ..... Center-pin support, semi-floating, 24° total oscillation
Reduction gear ..... Spiral bevel gear
Differential gear ..... Torque proportioning
Final reduction gear ..... Planetary gear, single reduction

BRAKES

Service brakes ..... Hydraulically actuated, wet disc brakes actuate on four wheels
Parking brake ..... Wet, multi-disc brake on transfer output shaft
Secondary brake ..... One of dual service brake circuits is commonly used

STEERING SYSTEM

Type ..... Articulated type, fully-hydraulic power steering
Steering angle ..... 38° each direction (40° to max end stop)
Minimum turning radius at the center of outside tire ..... 4880 mm **16' 0"**

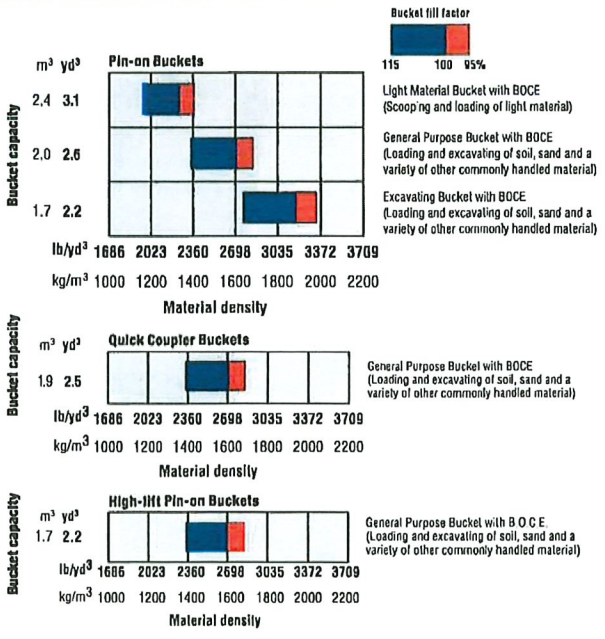
HYDRAULIC SYSTEM

Steering system:
Hydraulic pump ..... Gear type pump
Capacity ..... 85 ltr/min **22.5 U.S. gal/min** at rated rpm
Relief valve setting ..... 20.6 MPa 210 kgf/cm² **3,000 psi**
Hydraulic cylinders:
Type ..... Double-acting, piston type
Number of cylinders 2
Bore x stroke ..... 70 mm x 453 mm **2.76" x 17.8"**
Loader control:
Hydraulic pump ..... Gear type pump
Capacity ..... 54 ltr/min **14.3 U.S gal/min** at rated rpm
Relief valve setting ..... 20.6 MPa 210 kgf/cm² **3,000 psi**
Hydraulic cylinders:
Type ..... Double-acting, piston type
Number of cylinders—bore x stroke:
Lift cylinder ..... 2- 125 mm x 673.5 mm **4.9" x 26.5"**
Bucket cylinder ..... 1- 150 mm x 504 mm **5.9" x 19.8"**
Control valve ..... 2-spool type
Control positions:
Boom ..... Raise, hold, lower, and float
Bucket ..... Tilt-back, hold, and dump
Hydraulic cycle time (rated load in bucket)
Raise ..... 5.7 sec
Dump ..... 1.9 sec
Lower (Empty) ..... 3.2 sec

SERVICE REFILL CAPACITIES

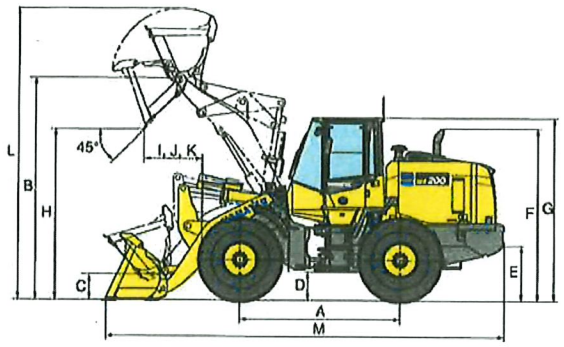
Cooling system	26.5 ltr	**7.0 U.S. gal**
Fuel tank	177 ltr	**46.8 U.S. gal**
Engine	15.5 ltr	**4.1 U.S. gal**
Hydraulic system	58 ltr	**15.3 U.S. gal**
Axle front	18.5 ltr	**4.9 U.S. gal**
Axle rear	18 ltr	**4.8 U.S. gal**
Transfer case	5 ltr	**1.3 U.S. gal**
DEF tank	14 ltr	**3.7 U.S. gal**

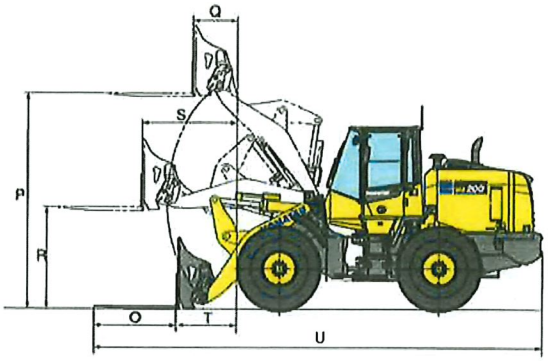
BUCKET SELECTION GUIDE



DIMENSIONS

Measured with 20.5-R25(L3) Tires, ROPS/FOPS cab





	Tread		1930 mm	**6'4"**
	Width over tires		2470 mm	**8'1"**
A	Wheelbase		2840 mm	**9'4"**
B	Hinge pin height,	Standard Boom	3885 mm	**12'9"**
	max. height	High Lift Boom	4325 mm	**14'4"**

C	Hinge pin height,	Standard Boom	425 mm	**1'5"**
	carry position	High Lift Boom	615 mm	**2'0"**
D	Ground clearance		495 mm	**1'7"**
E	Hitch height		965 mm	**3'2"**
F	Overall height, top of the stack		3010 mm	**9'10"**
G	Overall height, ROPS cab		3200 mm	**10'6"**

BUCKET

		General Purpose Bucket w/ Pin On B.O.C.E.	Light Material Bucket w/ Pin On B.O.C.E.	General Purpose Bucket w/ Quick Coupler B.O.C.E.	High Lift General Purpose Bucket w/ Pin On B.O.C.E.
	Bucket capacity: heaped	2.0 m³	2.4 m³	1.9 m³	1.7 m³
		2.6 yd³	**3.1 yd³**	**2.5 yd³**	**2.2 yd³**
	struck	1.7 m³	2.0 m³	1.6 m³	1.4 m³
		2.2 yd³	**2.6 yd³**	**2.1 yd³**	**1.8 yd³**
	Bucket width	2550 mm	2550 mm	2550 mm	2550 mm
		8'4"	**8'4"**	**8'4"**	**8'4"**
	Bucket weight	890 kg	965 kg	885 kg	825 kg
		1,926 lb	**2,127 lb**	**1,951 lb**	**1,819 lb**
H	Dumping clearance, max. height and 45° dump angle*	2965 mm	2875 mm	2810 mm	3480 mm
		9'8"	**9'5"**	**9'3"**	**11'5"**
I	Reach at max. height and 45° dump angle*	950 mm	1035 mm	1075 mm	940 mm
		3'1"	**3'5"**	**3'6"**	**3'1"**
J	Reach at 2130 mm 7' clearance and 45° dump angle*	1580 mm	1625 mm	1630 mm	1965 mm
		5'2"	**5'4"**	**5'4"**	**6'5"**
K	Reach with arm horizontal and bucket level*	2315 mm	2440 mm	2515 mm	2600 mm
		7'7"	**8'0"**	**8'3"**	**8'6"**
L	Operating height (fully raised)	5095 mm	5215 mm	5220 mm	5430 mm
		16'8"	**17'1"**	**17'2"**	**17'10"**
M	Overall length (bucket on ground)	7130 mm	7255 mm	7350 mm	7515 mm
		23'4"	**23'10"**	**24'1"**	**24'8"**
	Loader clearance circle (bucket at carry, outside corner of bucket)	11860 mm	11930 mm	11965 mm	12205 mm
		38'11"	**39'2"**	**39'3"**	**40'1"**
	Digging depth: 0°	110 mm	110 mm	120 mm	195 mm
		4"	**4"**	**5"**	**8"**
	10°	295 mm	320 mm	340 mm	360 mm
		12"	**13"**	**13"**	**14"**
	Static tipping load: straight	8725 kg	8650 kg	8525 kg	7075 kg
		19,235 lb	**19,070 lb**	**18,794 lb**	**15,598 lb**
	40° full turn	7645 kg	7570 kg	7450 kg	6150 kg
		16,854 lb	**16,689 lb**	**16,424 lb**	**13,558 lb**
	Breakout force	108 kN	107 kN	96 kN	125 kN
		11000 kgf	10920 kgf	9755 kg	12700 kg
		24,251 lb	**24,075 lb**	**21,506 lb**	**27,999 lb**
	Operating weight	11715 kg	11790 kg	12015 kg	11875 kg
		25,827 lb	**25,993 lb**	**26,489 lb**	**26,180 lb**

* At the end of tooth or B.O.C.E.

All dimensions, weights, and performance values based on ISO 7131, ISO 14397-1 and ISO 7546 standards. Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab and operator. Machine stability and operating weight affected by tire size and attachments.

FORK

			Fork With Quick Coupler
O	Fork tine length		1220 mm
			4'0"
P	Ground to top of tine at maximum lift		3740 mm
			12'3"
Q	Reach at maximum lift		810 mm
			2'8"
R	Ground to top of tine - boom and tine level		1750 mm
			5'9"
S	Reach - boom and tine level		1715 mm
			5'8"
T	Reach - tine level on ground		1110 mm
			3'8"
U	Overall length - tine level on ground		7775 mm
			25'6"
	Static tipping load - boom level: fork level, tine center	straight	6095 kg
			13,437 lb
		40° full turn	5340 kg
			11,773 lb
	Operating weight		11705 kg
			25,805 lb

Operating load per SAE J1197 (Oct, 2011), 50% of static tipping load.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab and operator. Machine stability and operating weight affected by tire size and attachments.

WA200-8

WEIGHT CHANGES

Tires or attachments	Change in operating weight		Change in tipping load				Width over tires		Ground clearance		Change in vertical dimensions	
			Straight		Full turn							
	kg	lb	kg	lb	kg	lb	mm	ft in	mm	ft in	mm	ft in
17.5-25-12PR (L2)	-610	-1345	-405	-893	-405	-893	2375	7'10"	425	1'5"	-70	-3"
20.5-R25 (L2)	+40	+88	+25	+55	+25	+55	2470	8'1"	495	1'7"	0	0

STANDARD EQUIPMENT

- 2-spool valve for boom and bucket control
- Alternator, 24 V/ 90 A
- Automatic hydraulic-driven fan with automatic reverse rotation
- Back-up alarm
- Batteries, 92 Ah/12V (2), 680 CCA
- Battery disconnect
- Boom kick-out, in-cab adjustable
- Bucket positioner
- Color, rear-view camera and monitor
- Counterweight, standard
- Electronically Controlled Suspension System
- Engine, Komatsu SAA4D107E-3 diesel
- Engine shut-off system, electric
- Equipment Management Monitoring System (EMMS)
  - Lights (central warning, brake oil pressure, engine oil pressure, parking brake, cooling fan reverse, DPF restriction, seat belt caution, Komtrax message)
  - Gauges (DEF level, engine coolant temperature, ecology, fuel level, HST oil temperature, speedometer/tachometer), variable speed display
- Front fenders
- Fuel pre-filter with water separator
- Horn, electric
- Hydrostatic transmission
- Komatsu Auto Idle Shutdown
- KOMTRAX® Level 5
- Lift cylinders and bucket cylinder
- Lights
  - Back-up light
  - Stop and tail light
  - Turn signal lamps, 2 front and 2 rear with hazard switch
  - Working lights, halogen, 2 front cab mount
  - Working lights, halogen, 2 front fender mount
  - Working lights, halogen, 2 rear grill mount
- Loader linkage with standard lift arm
- Multifunction mono-lever loader control with transmission F/R switch
- Parking brake, electric
- Radiator, wider core
- Radiator mask, swing up
- Rear view mirrors, outside (2) inside (2)
- Rims for 20.5-R25 tires
- ROPS/FOPS Cab Level 2
  - 2 x DC12V electrical outlets
  - Ashtray
  - Auto air conditioner
  - Cigarette lighter, 24V
  - Color LCD/TFT multi-monitor
  - Cup holder
  - Floor mat
  - Operator seat, reclining, air suspension type, heated
  - Radio, AM/FM with AUX input jack
  - Rear defroster, electric
  - Seatbelt, 2-point retractable, 76mm **3"** width
  - Space for lunch box
  - Steering wheel, tilt and telescopic
  - Sun visor, front window
  - Windshield washer and wiper, front with intermittent
  - Windshield washer and wiper, rear
- Service brakes, wet disc type
- Starting motor, 5.5 kW
- Transmission speed ranges, 4 forward and 4 reverse
- Vandalism protection kit, padlocks for battery box (2)

OPTIONAL EQUIPMENT

- Three-spool valve (will utilize integrated proportional control switch included in the multi-function mono-lever) and piping
- Auxiliary steering (SAE)
- Centrifugal engine air pre-cleaner
- Cutting edge (bolt-on type)
- Full rear fenders
- High lift boom
- Limited slip differential (F&R)
- Quick coupler
- Various tire options, radial and bias
- Various bucket and fork options

AESS920-02

AD05(Electronic View Only) 05/18 (EV-1)

KOMATSU®

Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.

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SUBPOENA RESPONSE #4 AND #5

March 20, 2023

Ashley Carver
Vermont Department of Environmental Conservation
Watershed Management Division, Stormwater Program - MSGP
Davis Building – 3rd Floor
One National Life Drive
Montpelier, VT 05620-3522

Subject: Chesterfield Stone – Julian Enterprise, Multi-Sector General Permit
Application 3-9003 – Chandler Road, Chester, VT ANR Project #7417
TCE Project #22-270

Dear Ashley:

Enclosed, please find a permit application, SWPPP, and plans to authorize Julian Enterprises, LLC to discharge stormwater under the Multi-Sector General Permit (3-9003) for the existing Chesterfield Quarry in Chester, Vermont. The State previously deemed an application for this site incomplete under Project #7417-9003 for Julian Development.

Thank you for your assistance during the development of this project. Should you have any questions, please do not hesitate to contact me directly.

Regards,

Jeremy M. Matosky, P.E.
President and CEO

cc: James Goss, Esq.
Andrew Julian, Julian Enterprises

Enclosed: Permit Application NOI
Application Fee
Stormwater Pollution Prevention Plan (SWPPP)
Plans:

- Existing Conditions Plan
- SWPPP Plan
- C8-01 Erosion Details
- C8-02 Erosion Prevention and Sediment Control Details
- Site Natural Resource Maps

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
STORMWATER PROGRAM

Notice of Intent (NOI) for Stormwater Discharges

Associated with **INDUSTRIAL Activity** Under the Vermont Multi-Sector General Permit (MSGP) 3-9003

Submission of this NOI constitutes notice that the entity in Section A intends to be authorized to discharge pollutants to waters of the State from the facility or site identified in Section B under Vermont's Stormwater MSGP. Submission of this NOI also constitutes notice that the party identified in Section A of this form has read, understands, and meets the eligibility conditions of Part 1 of the MSGP; agrees to comply with all applicable terms and conditions of the MSGP; understands that continued authorization under the MSGP is contingent on maintaining eligibility for coverage, and that a Stormwater Pollution Prevention Plan (SWPPP) will be implemented at the facility. In order to be granted coverage, all information required on this form must be provided, including the requirement to prepare and implement a SWPPP as well as payment of the $680 fee to the State of Vermont.

A. Operator Information (as of January 1st, 2018, email addresses are required)

1a. Company Name: Julian Materials, LLC

1b. Contact Name/Title: Andrew Julian

2a. Mailing Address: 418 Meadow Street, Suite 203

2b. Town: Fairfield	2c. State: CT	2d. Zip: 06824

3. Phone: 802-875-6564	4. Email: acjulian@julianenterprises.com

5. Application Preparer Company/Contact(if applicable): Jeremy Matosky, P.E.

6. Mailing Address: 478 Blair Park Road

6b. Town: Williston	6c. State: VT	6d. Zip: 05495

7. Phone: 802-879-6331	8. Email: Jeremy.Matosky@tcevt.com

B. Facility/Site Information

1. Facility/Site Name: Chesterfield Stone

2. The facility is: ○ New ◉ Existing

3a. Physical Address: 137 Chandler Road

3b. Town: Chester	3c. State VT	3d. Zip 05143

4. Phone: 802-875-6564	5. Email: acjulian@julianenterprises.com

6. Project number for previously authorized stormwater discharge(if applicable): 7417 -9003

7. Latitude: 43°19'55.04"N Longitude: 72°35'7.68"W

C. Industrial Activity Information

1. List the Standard Industrial Classification (SIC) code(s) that best represents the facility's industrial activity:
a. Primary SIC Code: 1411 b. Secondary (if applicable) : 1423 , 1499

2. Applicable sector(s) of industrial activity, as designated in Appendix D of the MSGP, that include associated discharges that you seek to have covered under this permit:

☐ Sector A	☐ Sector F	☐ Sector K	☐ Sector P	☐ Sector U	☐ Sector Z
☐ Sector B	☐ Sector G	☐ Sector L	☐ Sector Q	☐ Sector V	☐ Sector AA
☐ Sector C	☐ Sector H	☐ Sector M	☐ Sector R	☐ Sector W	☐ Sector AB
☐ Sector D	☐ Sector I	☐ Sector N	☐ Sector S	☐ Sector X	☐ Sector AC
☐ Sector E	■ Sector J	☐ Sector O	☐ Sector T	☐ Sector Y	☐ Sector AD

3. For Sector G, H, I and J facilities: Is over 1 acre of new earth disturbance planned at the facility? ☐ Yes ☑ No

If yes, complete the Construction General Permit, 3-9020 Appendix A "Risk Evaluation" and associated erosion control plans and submit these with this NOI.

4 of 5 2

D. Receiving Water Information Use DEC's Waterbody Identification (WBID) ArcGIS webpage. Go to ArcGIS Explorer located at: http://www.arcgis.com/explorer/. Use the search tool in the upper right hand corner and type "DEC WBID."

1. Name of the facility's receiving water: Great Brook

2. Does stormwater from your facility drain to a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☑ No
If yes, Name of MS4 operator (State/ City/ or Town Name):

3. Are any of your discharges directly into any segment of an "impaired" water (listed on the State's 303(d) List*)?

☐ Yes ☑ No If yes, list the pollutant causing the impairment: _____

Is the pollutant present in your discharge? ☐ Yes ☐ No

Has a TMDL been completed for the pollutant causing the impairment? ☐ Yes ☐ No

4. Are any of your discharges into an Outstanding Resource Water (ORW)? (for new dischargers only)

☐ Yes ☑ No

ORWs include 1) Batten Kill River, Towns of East Dorset and Arlington, 2) Pike's Falls/Ball Mountain, Town of Jamaica, 3) Poultney River, Towns of Poultney and Fair Haven, and 4) Great Falls, Ompompanoosuc River, Town of Thetford.

*See http://www.vtwaterquality.org/stormwater/htm/sw_msgp.htm for the State's 303(d) list and list of ORW segments.

F. Certification Relating to the Accuracy of the Information Submitted

I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Operator Name: 6 Shaws Cove, LLC Title: Member

Signature: _____ Date: 3/20/2023

Application Preparer (if applicable): TCE, Inc. Jeremy M. Matosky, P.E. Title: President & Chief Executive Officer

Signature: Jeremy Matosky Date: 3/20/2023

Refund Policy:

- If an application is modified, withdrawn or denied after technical review has commenced; all fees are retained.
- If an application is withdrawn prior to administrative review; all fees will be refunded.
- If an application is withdrawn after administrative review but prior to commencement of technical review, deemed administratively incomplete and returned to applicant, or determined that a permit is not required; administrative fees are retained, and permit application review fees will be refunded.

Please submit this form and payment using ANROnline at: https://anronline.vermont.gov/?formtag=WSMD_Intake
Direct questions to: ANR.WSMDStormwaterGeneral@vermont.gov

If unable to submit online, mail this completed form with the $680 fee (a $240 administrative processing fee and a $440 application fee) made payable to the State of Vermont to:

VT Department of Environmental Conservation
Watershed Management Division, Stormwater Program – MSGP 1 National Life Drive, Davis 3
Montpelier, VT 05620-3522

4+5 3

Stormwater Pollution Prevention Plan
for

CHANDLER ROAD QUARRY
137 CHANDLER ROAD

TOWN OF CHESTER
WINDSOR COUNTY, VERMONT

Prepared on behalf of:

Operator:

Julian Materials, LLC
418 Meadow Street, Suite 203
Fairfield, CT 06824

Prepared By:

Trudell Consulting Engineers (TCE)
478 Blair Park Road
Williston, VT 05495
802-879-6331

Date Written: 03/20/2023
Last Update: 07/13/2023

Table of Contents

1 Introduction

This stormwater pollution prevention plan (SWPPP) covers the operations at the CHANDLER ROAD QUARRY at 137 Chandler Road in Chester, Vermont. It has been developed as required under Vermont's Multi-Sector General Permit (General Permit 3-9003). This SWPPP describes this facility and its operations, develops an inventory of potential pollutant sources, identifies controls and best management practices (BMP's) for reducing the discharge of pollutants in stormwater runoff, and outlines measures for implementing and reviewing this plan.

Stormwater runoff is rainwater or snowmelt that runs off land into streams, rivers, and lakes. When stormwater runs through industrial sites, it has the potential to erode and transport soil and sediment and come into contact with pollutants and transport them into national waterways, thereby affecting the quality of waters of the United States.

The purpose of the SWPPP is to lay out an approach for erosion and sediment control and stormwater management that will be effective throughout the life of the facility. The SWPPP shall identify all sources of sediment, pollutants, operational practices, and authorized non-stormwater discharges that may affect the quality of stormwater discharges associated with industrial activity at the facility. The SWPPP shall identify and describe measures, best management practices (BMPs), and controls that are to be used to minimize, reduce, eliminate or prevent pollutants in stormwater discharges such as good housekeeping, preventive maintenance, sediment and erosion control, and management of stormwater runoff. The SWPPP shall include requirements for personnel training, monitoring and inspections, site security, corrective action, reporting, and recordkeeping. The SWPPP shall identify the pollution prevention team that will be responsible for responding to emergencies at the facility.

SWPPP shall be prepared by a qualified person who is knowledgeable in the principles and practices of erosion and sediment control. This plan does not have to be developed or certified by a licensed Professional Engineer; however, all components of the SWPPP that involve the practice of engineering, shall be prepared by, or under the direct supervision of a professional engineer licensed to practice in the State of Vermont. The operator has opted to have this plan prepared by a licensed P.E. in the State of Vermont, Jeremy M. Matosky, P.E. #7637, TCE, Inc. DBA Trudell Consulting Engineers, who visited the site on August 8, 2022, February 9, 2023, May 2023, and June 2023.

2 Pollution Prevention Team

The stormwater pollution prevention team is responsible for developing, implementing, maintaining, and revising this SWPPP. Each member of the team is familiar with the management and operations of the erosion and sediment control features at the facility, and collectively, works together to keep the SWPPP current. Specific responsibilities include inspections, recordkeeping, report submissions, employee training, water sampling, and water analyses. The table below identifies the individual members of the stormwater pollution prevention team and their responsibilities. Individual responsibilities may vary from those identified below based on Julian Materials, LLC standard practices and on providing mutual assistance.

STORMWATER POLLUTION PREVENTION TEAM			
NAME / PHONE	TITLE	COMPANY	RESPONSIBILITIES
Andrew Julian (203) 668-5434	Owner	Julian Materials, LLC	1
Henry Holt 603-558-5949	Site Manager	Julian Materials, LLC	2,3,4,5,6,7
Endyne – Lebanon, NH 603-678-4891	Laboratory	Endyne Environmental Laboratory	8
Jeremy Matosky, P.E. 802-879-6331	Stormwater Engineer, Independent 3rd Party Consultant	TCE, Inc. DBA Trudell Consulting Engineers	9

Pollution Prevention Team Responsibilities:

1. Authorized Representative
2. SWPPP Coordinator
3. Implementation of Best Management Practices
4. Inspection and Maintenance
5. Documentation, Record Keeping and Submissions
6. Employee Training
7. Sampling
8. Analytical
9. Plan Preparation and Revisions

A copy of the latest SWPPP (this document) is to be maintained at the site at all times. Failure to keep a copy of the SWPPP onsite is a violation of the permit. The copy shall be available to the VTDEC for review at any time of an on-site inspection. A copy of the SWPPP must be furnished to the DEC within five business days of a request.

3 Site Description

3.1 Facility Information

Street Address: 137 Chandler Road

City: Chester State: Vermont Zip: 05413

SPAN: 144-045-10646

Latitude: 43°19'55.04"N Longitude: 72°35'7.68"W

MSGP Sector: J2 SIC Code(s): 1411, 1423 & 1499

Parcel Size: ~8.3 acres

Phone: 802-875-6564

E-mail: sales@julianmaterialsllc.com Website: https://www.allstonevermont.com

SECTOR J: MINERAL MINING AND DRESSING		
J1	1442	Construction Sand and Gravel
	1446	Industrial Sand
J2	1411	Dimension Stone
	1422-1429	Crushed and Broken Stone, Including Rip Rap
	1481	Nonmetallic Minerals Services, Except Fuels
	1499	Miscellaneous Nonmetallic Minerals, Except Fuels
J3	1455, 1459	Clay, Ceramic, and Refractory Materials
	1474-1479	Chemical and Fertilizer Mineral Mining

This SWPPP complies with MSGP general provisions and with Part VII Sector J specific permit requirements pertaining to active and inactive mineral mining and dressing facilities. Applicable Standard Industrial Classification Codes are SIC 1411, Nonmetallic Minerals and Services, except fuel, SIC 1423 Crushed and Broken Granite, and SIC 1499, Miscellaneous Nonmetal Minerals, except fuel. Based on these classifications, the site is subject to benchmark monitoring for total suspended solids (TSS) and effluent limit (annual grab sample) for total suspended solids (TSS) and pH.

3.2 Narrative Site Description

The Chandler Road Quarry Facility is located at 137 Chandler Road in the Town Chester, Windsor County, Vermont, 05143 (**Figure SW-1**). **Figure SW-2** is a Natural Resource Atlas Map showing various natural resource GIS layers available in the vicinity of the subject property. **Figure SW-3** is a SWPPP Map and identifies the labeled locations of the following site features, if present:

- Property line and acreage
- Significant structures
- Stockpiles
- Roadways, access and haul roads
- Impervious and paved areas
- Stormwater discharge outfalls and contributing areas
- Surface water bodies
- Stormwater drainage direction arrows
- Stormwater conveyances, ditches, etc.
- Vehicle storage and equipment maintenance areas
- Fuel oil and diesel storage and fueling stations
- Structural BMPs
- Discharge locations into nearby receiving waters (Great Brook)

Chandler Road Quarry is a fully operational granite quarry; the facility has been in existence for more than 50 years along with the access drive and support areas. The existing quarry pit encompasses approximately one (1) acre on the northern end of the property adjacent to an overhead power transmission line.
The site began operations prior to 1970 as an operational quarry where stone is extracted from the property, re-sized, and prepared for sale. The current plant consists of an administration building (main office), an employee change house/locker room, a truck shop/maintenance garage, and a warehouse/shed where stone is split, cut and sorted. The operation encompasses just over 50% or approximately 4.4 acres of the existing ±8.3-acre parcel. The westerly side of the property follows the Great Brook which parallels Dean Brook Road and flows in a southeasterly direction,

Impervious Area

Total site area in acres: 8.7 acres
Approximate Impervious cover in acres (parking, access roads and buildings): 1.0 acres

$$\left[\frac{(\text{Area of Roofs} + \text{Area of Paved and Other Impervious Surfaces})}{\text{Total Area of Facility}}\right] \times 100$$

±1.0 ac. / 8.3 ac. x 100 = Percent impervious: 12.0%

Site Operations

Outdoor activities and storage of materials: The outdoor activities on site consist of the extraction, processing, storage, handling, and transportation of natural stone material. Extraction of stone occurs within the active quarry pit and consists of hydraulic hammering, air drilling, and/or blasting when necessary. The excavated stone is sorted and broken down further with hydraulic guillotines and then smaller pieces are cut using wet saws into desired "thin stone" sizes within a warehouse/shed on the property. The finished product is sorted, palletized and stored on site until it can be loaded on trucks prior to leaving the site for final delivery.

Buildings: There are two buildings on site, a processing, splitting, and sorting shed and an office and cutting building. A few temporary style "hoop" sheds are also used on site to store equipment.

Within the cutting building, wet saws are used to slice stones after being broken down using hydraulic guillotines. The process water from cutting stone is recycled in a series of concrete tanks adjacent to the building, and the sediments periodically dredged and stored on site for drying. The recycled process water is a closed system with no discharge.

Quarry Operating Hours

Monday – Saturday	7:00 am – 5:00 pm
Sundays	Closed

Vehicles:

The number of vehicles on site varies throughout the year. These vehicles consist of various extraction and hauling vehicles which may include articulated loaders, tracked excavators, on and off-road dump/haul trucks, tractor trailers, water trucks, a fuel truck, a service truck, and other earth moving equipment. Passenger vehicles are also regularly on site to be used by the quarry employees.

Fueling and Equipment Maintenance:

Fuel and Oil Storage: Fueling for on-site diesel equipment is done at an onsite aboveground portable double-walled 500-gallon UL 142 rated fuel tank. The on-site tank is periodically filled via fuel delivery truck.

New and used oils are stored in sealed drums and stored in covered in "hoop" style sheds. No refueling, maintenance, or fuel storage occurs within active excavation areas.

Stormwater Drainage and Outfalls:
Stormwater from the site generally flows from east to west towards the Great Brook.

S/N 001 Access Road, Parking and Product Storage Areas

Runoff from the southern portion of the access road overland flows towards the entrance gate before discharging down the bank to the Great Brook.

S/N 002 Buildings, Access Road, Parking and Product Storage Areas

Runoff from these areas is controlled by a series of aggregate filter berms placed along the top of bank to the Great Brook. No discrete discharge points were observed but due to a lack of a solid impervious core, some filtered stormwater may discharge through the berm in larger storm events. A reinforced silt fence is used at the toe of the berm for additional protection and fines removal.

S/N 003 Quarry Settling Pond, Dewatering Bag, & Stone Lined Discharge Swale

Groundwater and surface runoff from the quarry pond is collected and pumped via a floating skimmer intake into a sediment containment dewatering bag. The dewatering bag discharges to an adjacent stone lined swale with check dams leading to a culvert at the Great Brook. The outlet of this culvert is S/N003. The quarry itself serves as a sump and allows fines to settle to the bottom of the quarry over time. The normal pool of the quarry is kept low to allow for adequate storage from normal rain events. Additional dewatering bags may be necessary depending on the dewatering and removal rate (see the SWPPP Site Plan). See the Dewatering Section of this document for more information.

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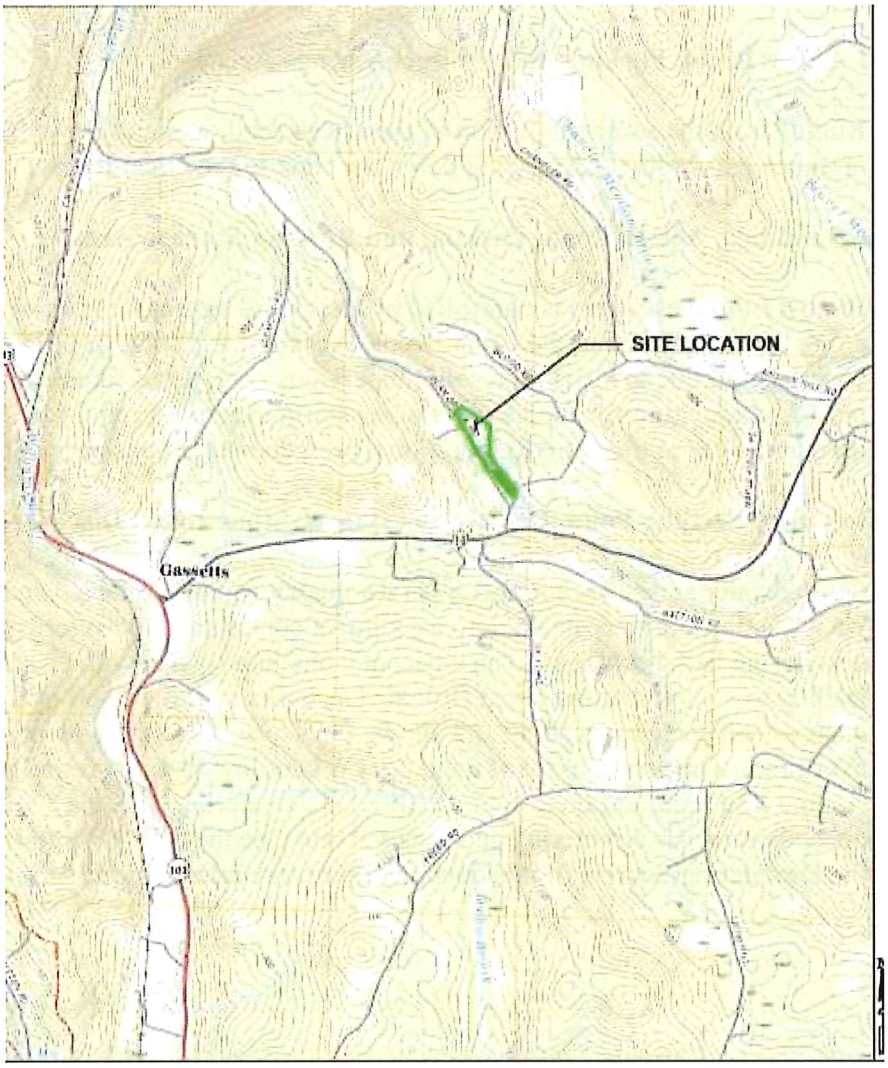
3.3 General Location Map



3.4 Site Map

The SWPPP Plan, by Trudell Consulting Engineers, accompanies this written Stormwater Pollution Prevention Plan (SWPPP) and depicts the drainage conditions on site.

3.5 Description of Receiving Waters

Receiving Water Name: Great Brook and/or Wetland Tributary of Great Brook

Discharge Points flowing to this receiving water: S/N001, S/N002, & S/N003

Applicable Vermont Water Quality Standards: Class B

Impaired Status: Not Impaired per 303(d)

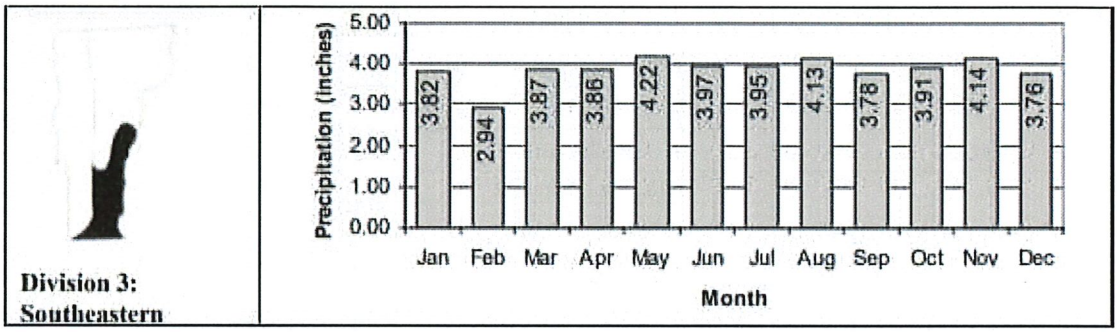
3.6 *Precipitation Information*

Average Annual Precipitation: 46 inches

Wettest Months: July and August

Expected Rainfall in the Wettest Month: 4.22 inches

The precipitation information listed above is based on data from the National Climatic Data Center for Division 2: Southeastern Vermont from 1971 to 2000 in accordance with the following table of Normal Monthly Precipitation.



Precipitation is well distributed throughout the year. High intensity storms are sporadic with most thunderstorms occurring in the summer months. According to the National Oceanic and Atmospheric Administration ("NOAA"), 24-hour storm events can occur in this area resulting in 2.21 inches (1 Year Storm), 3.81 inches (10 Year Storm), 5.12 inches (50 Year Storm), and 5.71 inches (100 Year Storm) of precipitation of 24 hours.

3.7 Inventory of Exposed Materials and Potential Pollutant Sources

Table 1: Inventory of Site Areas and Activities Exposed to Stormwater

Drainage Area	Activity/ Facility Area	Significant Materials	Amount (Approx.)	Discharge Point
1/2	Product stockpiles	Hauling and Loading Equipment	Varies	S/N-001 and S/N-002
		Hydraulic Oil	Potential Spill from Service Truck	
		Gasoline	Potential Spill from Equipment/Fuel Truck	
		Diesel Fuel	Potential Spill from Equipment/Fuel Truck	
		Processed Aggregate Material	Varies	
		Sediment	Varies	
		Rock Dust	Varies	
1/2	Access road	Hauling Equipment	Multiple	S/N-001 and S/N-002
		Hydraulic Oil	Potential Spill from Service Truck	
		Gasoline	Potential Spill from Equipment	
		Diesel Fuel	Potential Spill from Equipment	
		Processed Aggregate Material	Varies	
		Sediment	Varies	
		Rock Dust	Varies	
2/3	Shop, Office and Surrounding area, Hauling materials, loading equipment, sorting, portable crushing equipment	Hydraulic Oil / Grease	Potential Spill from Equipment	SN-002 and SN-003
		Gasoline	Potential Spill from Portable Equipment or vehicles	
		Diesel Fuel	Potential Spill from Generators / Equipment/ or Vehicles	
		Raw Aggregate Material	Varies	
		Processed Aggregate Material	Varies	
		Sediment	Varies	
3	Active Quarry Pit Excavation, Drilling, Hydraulic hammer, and related machinery Hauling and Loading Equipment	Diesel Fuel, Hydraulic Oil or Grease	Potential Spill From excavation equipment	S/N-003
		Raw Aggregate Material	Varies	
		Sediment / Overburden	Varies	
		Rock Dust	Varies	
		Hydraulic Oil	Potential Spill from Service Truck	
		Gasoline	Potential Spill from Equipment	
		Diesel Fuel	Potential Spill from Equipment	
		Processed Aggregate Material	Varies	
		Sediment	Varies	
		Rock Dust	Varies	

Table 2: Significant Materials Used Onsite

Trade Name Material	Chemical/ Physical Description	Stormwater Pollutants
Hydraulic Oil	Brown oily liquid hydrocarbon	Petroleum distillates, mineral oil
Gasoline	Distillate fuel oil, colorless to yellow liquid	Benzenes, toluene, xylene, naphthalene, ethanol, MTBE, hexane, cumene, styrene, pentanes
Diesel Fuel	Distillate fuel oil, colorless/clear liquid	Naphthalene, heptane, hexane, nonane, octane

3.8 Inventory of Past Spills and Leaks

There are no known spills or leaks at this site within the last five years.

4 Non-Stormwater Discharges

4.1 Certification of Non-Stormwater Discharges

Non-stormwater discharges have been evaluated on a discharge point basis. A visual assessment of the discharge and contributing drainage area(s) was performed on February 9, 2023, by Trudell Consulting Engineers (TCE, Inc.). The results of this assessment are summarized below and on Worksheet 1, Appendix A. Julian Materials, LLC will continue to monitor the discharge locations during the frequency outlined in this plan.

S/N-001: Discharges associated with the access road, and material storage area were observed during a rain event and only stormwater runoff was observed.

S/N-002: Discharges associated with the access road, and material storage area were observed during a rain event and only stormwater runoff was observed.

S/N-003: Only stormwater runoff was observed to discharge into the quarry settling pond.

4.2 Allowable Non-Stormwater Discharges

There are no allowable non-stormwater discharges at this facility.

5 Best Management Practice (BMP) Identification

5.1 Source Protection BMPS

Good Housekeeping:
Good housekeeping procedures are and will continue to be implemented onsite to maintain a clean and orderly work environment, and to reduce the possibility of introducing pollutants into stormwater runoff. These general guidelines should be followed:

- Care should be taken when maintaining vehicles to only apply the necessary amount of lubricants and to clean up any spills of material that may be mobilized by precipitation.

- If vehicles or equipment are to be stored outside long-term, oil and other fluids should be drained first.

- Any spills of a hazardous substance should be reported to the SWPPP coordinator immediately, and the Spill Response Plan (Section 5.2) should be implemented.

Minimizing Exposure:
There is no outdoor storage of hazardous materials on site, except for fuel which is stored in the fuel truck or the diesel fuel tank. The fuel truck contains a double wall tank to further prevent the possibility of a tank failure and subsequent spill. A roofed structure will be constructed for the diesel fuel tank and will include an enclosed concrete bottom with four posts and a pitched roof over the fuel storage tank.

Preventative Maintenance:
A preventative maintenance schedule for the regular maintenance of onsite equipment should be followed to help prevent system failures and reduced performance that could cause contamination of stormwater. Quarterly equipment inspections are proposed with additional maintenance to occur as needed.

5.1.1 Area Specific BMPs

BMP & Facility Area	Inspection/Maintenance Item	Inspection & Maintenance Frequency	Responsible Party
Quarry Pit	Remove excess accumulated sediment from quarry floor and holding pond	As Needed	Owner
	Maintain grades within the active pit to capture as much runoff as possible within the internal holding pond.	On Going	Owner
Pipe Discharge From Stone Lined Swale	Monitor the discharge outlet of the pipe from the stone lined swale, repair erosion and stabilize outlet as needed	Monthly	Owner
Access Road, Stockpile Area, Support Areas	Remove accumulated sediment, repair erosion, regrade to maintain positive drainage to roadside swale or toward settling pond, Inspect and repair any site containment berms	After Each Rain Event more than ¼ "	Owner
Sediment Containment Dewatering Bag	Remove accumulated sediment, replace filter bag as needed	After Each Use	Owner
Stone Lined Swale	Remove accumulated sediment and repair erosion as needed	Quarterly	Owner
Sitewide	All spills will be cleaned up immediately using dry methods. Spill areas are never washed down with water	On Going	Owner
	Trash will be picked up as needed	On Going	Owner
	Dust will be controlled on site with water	On Going	Owner

5.2 Spill Response

The SWPPP will be modified within 14 days of knowledge of a spill to include information regarding the nature, date, and cause of the release. The plan will be modified with measures to prevent reoccurrence and to improve response.

Specifically, we will follow the following procedure:

1. Assess the Hazard and Perform Initial Response
For spills that can be safely managed without assistance:
- Stop the spill at its source;
- Prevent spilled material from entering storm drains, waterways, drainage ditches, etc;

- Contain spilled material using a barrier (absorbent pads or socks), temporary dike or trench.

  For all other spills, a cleanup contractor will likely need to be hired since they have the training and equipment necessary to safely respond to dangerous hazardous material spills.

2. Report the Spill

Any hazardous material spill to the land or water that meets the following criteria must be immediately reported to the Department of Environmental Conservation (DEC) Spill Response Team (spill team) by calling the **24-hour Hazardous Materials Spills Hotline at 1-800-641-5005.** *If there is any question about whether a spill is reportable, call.*

- A spill of 2 gallons or more;
- A spill that is less than 2 gallons, but poses a threat to human health or the environment (for example, a gallon of gasoline spilled to a wetland); or
- A spill that exceeds a CERCLA reportable quantity.

Any person who has knowledge of a spill and who may be subject to liability for that spill, is responsible for reporting the spill. In addition to reporting to the DEC, any spill of hazardous material that impacts (or threatens) surface water (e.g., lakes, streams, wetlands) must also be reported to the U.S. Coast Guard via the National Response Center at **1-800-424-8802**.

3. Clean up and Follow up

- Ensure that the spill is cleaned up to the extent that it no longer presents a threat to human health or the environment;
- Make a hazardous waste determination for all spill cleanup materials;
- Ensure that contaminated soil/water/debris is collected and managed appropriately;
- **For any reportable spill, submit a written follow-up report within 10 days detailing how the spill was cleaned up and how waste was managed.**

5.3 Vehicle and Equipment Washing

No wash waters from the cleaning of vehicles or equipment shall be allowed to enter waters of the state and vehicle washing shall occur as follows:

Limit washings to 30 or fewer vehicles per week

If the following conditions are met, the wash water from 30 or fewer vehicle washings per week may be discharged to the **ground surface**.

A. Whether these vehicle washings occur indoors or outside, the following conditions must be met:
   i. The wash water going to the ground surface must sheet flow over a vegetated area and infiltrate or evaporate on-site, therefore the site should not be graded in a way that encourages the collection of the wash water.
   ii. The wash water must not cause soil erosion and must not reach waters of the state, either directly or through stormwater drains or ditches.

iii. Only non-phosphorus soaps may be used.
iv. The use of acids, bases, metal brighteners and degreasing agents as well as pressure washing engines, undercarriage washing and engine cleaning are all prohibited.

B. If the vehicle washing takes place indoors (discharging to ground surface), the following **additional** conditions must be met:
   i. All washing must occur in a wash bay that has a floor drain and is physically separated from where vehicles are serviced.
   ii. An oil-water separator must be installed on the floor drain piping.
   iii. iii. The floor drain must be registered with the UIC program (call the UIC Program, 802-241-3822).
   iv. iv. Hazardous materials can't be stored in the wash area unless adequate containment is provided.

C. If the vehicle washing takes place outside; the following **additional** conditions must be met:
   i. Whenever possible, the washing should occur on an impermeable surface (i.e. concrete, asphalt, plastic, or other) and then sheet flow over a vegetated area.

If there is ever a hazardous spill to a floor drain or to the ground and there is a potential for groundwater contamination or the contents of a holding tank is in question, contact the Hazardous Spills Hotline 1-800-641-5005 for assistance.

5.4 Sediment and Erosion Control

Significant earth disturbing activities, causing sediment and erosion, are not anticipated on this site as overburden material has been previously removed and future mining operations will occur within or near the existing cleared facility area, which is mostly exposed bedrock.

Any sediment collected during overland flow of stormwater runoff is collected within the quarry's holding pond, or access road swale. The sediment is removed as outlined in the maintenance items in section 5.1.1 of this plan.

Prior to beginning any future earth disturbing construction projects with greater than one acre of disturbance, the facility will contact the Agency of Natural Resources to determine if a construction general permit (CGP) under 3-9020 is required or amend the MSGP to incorporate EPSC requirements.

5.5 Structural BMPs

All structural BMPs are to be maintained in accordance with section 5.1.1 and as follows.

Structure:	Filter Containment Berms and Sediment Containment Berms
Date of Implementation:	
Discharge Point:	S/N-001& S/N-002
Area(s) Treated:	Buildings, Access Road, Parking and Product Storage Areas
Pollutants Removed:	Sediment

Maintenance Requirement(s): Check for Excess Sediment and Erosion Frequency: On-Going

Structure:	Quarry holding pond and Dewatering Filter Bag
Date of Implementation:	2023
Discharge Point:	S/N-003
Area(s) Treated:	Quarry and adjacent support areas
Pollutants Removed:	Sediment

Maintenance Requirements: Remove Sediment, Repair Erosion, Replace Bag as needed, Additional Bags may be needed Frequency: On-Going and as needed

Structure:	Stone Lined Swale and Check Dams
Date of Implementation:	2023
Discharge Point:	S/N-003
Area(s) Treated:	Quarry and adjacent support areas
Pollutants Removed:	Sediment

Maintenance Requirement(s): Check for Excess Sediment and Erosion, Repair as needed Frequency: On-Going

5.6 Quarry Dewatering Plan

The following procedures shall be adhered for the dewatering of the quarry holding pond:

1. Quarry Hole Pumping: The portable pump inlet in the quarry settling pond shall be from a skimmer intake at the top of the water column. The dewatering frequency will vary depending on rainfall and use.
    a. Chemical Additive/Flocculant Use: A flocculant may be mixed with the discharge during dewatering in accordance with the following requirements:
        i. Allowed Polymer Flocculant – Hychem, Inc. Hyperfloc CP627
            1. No alterations to the specified flocculant noted shall be used without VT DEC approval and an update of this SWPPP document
        ii. Allowed Flocculant Max Concentration – 50 mg/L (NSF requirement)
    b. Stormwater or groundwater runoff shall be the only dewatering discharge from the quarry settling/holding pond. If oil, grease, or other pollutants are observed in the quarry pond, this fluid shall pass through an oil/water separator tank and/or filter. No solids or foam shall be dewatered to discharge from the quarry holding pond. Consult with the engineer before pumping if non-stormwater/groundwater is present in the quarry pond.

2. Dewatering Outlet and Dewatering Bag: The forcemain from the quarry dewatering pump shall discharge into a sediment containment dewatering bag. The bag shall be 15'x15' minimum. The bag shall be located adjacent to the stone lined swale and all flow shall be directed to the swale. If dewatering discharge rates exceed the manufacturer flow rate for the bag, additional bags shall be installed. The bag/bags shall be installed on a level surface. The bag shall be inspected during each use to ensure that flow is discharging through the bag in accordance with manufacturer requirements without holes or tears in the filter material. The bag shall be replaced when full and/or damaged.

3. Stone Lined Swale and Compliance Discharge Point: The dewatering bag shall discharge to a stone lined swale with check dams leading to the compliance point (S/N003) at the Great Brook. All flow from the bag shall enter the swale. Vegetation of the swale may be allowed with Engineer approval.

6 BMP Implementation

6.1 Routine Inspections

Facility inspections will be performed every quarter by the quarry foreman, project manager, or representative of the facility owner. If stormwater BMPs are found to be functioning incorrectly, maintenance will be performed before the next anticipated storm event, or as necessary to maintain effectiveness of the stormwater controls. A sample inspection form and records of past inspections will be kept in Appendix B of the SWPPP.

6.2 *Employee Training*

All employees will attend a training session annually. New employees will be trained within 2 weeks of hire. Records of attendance are to be kept with this plan using Appendix C found at the end of this plan.

Topics to be included in employee training:

- Introduce Pollution Prevention Team and discuss need for the SWPPP
- Spill response procedure
- Review of past spills
- Review of good housekeeping procedures
- Proper material handling procedures
- Proper disposal or recycling of materials
- Be sure employees know where cleaning materials and spill kits are located
- Review sources of stormwater pollutants used onsite
- Familiarize employees with drainage routes near areas where industrial materials are handled

7 Monitoring Requirements

Ultimately, the goal of this SWPPP is to protect the quality of water resources. To evaluate the effectiveness of the measures described here, the following monitoring activities will be conducted on the stormwater discharges at the Julian Materials, LLC Chandler Road Quarry. Monitoring results will be used to regularly reassess the impact of pollutant sources and the need for best management practices (BMPs). The SWPPP will be updated and improved throughout the term of the permit and these updates will be informed by the results of monitoring.

7.1 *Quarterly Visual Monitoring*

Each discharge point on the site will be examined each quarter by a Julian Materials, LLC Construction Project Manager for evidence of contamination during a runoff event. Monitoring will take place within the first 30 minutes of a precipitation or snowmelt event, if possible, but no more than 60 minutes after onset. Precipitation events must be greater than 0.1 inches in magnitude and occur at least 72 hours after the last runoff producing event. Results of quarterly visual monitoring can be found in Appendix D.

7.2 *Benchmark Monitoring*

During the first four quarters of the permit, benchmark monitoring will be conducted for the parameters described in the following table:

Parameter	Benchmark Cutoff Concentration
Total Suspended Solids	100 mg/L

Sampling will occur during a storm event producing at least 0.1 inch of precipitation, and which occurred at least 72 hours after the last storm event. A single grab sample will be taken at each outfall during the first 30 minutes of the discharge. If sampling is not possible during the first 30 minutes, then the sample will be taken during the first hour of the discharge and the reason why sampling during the first half hour was infeasible will be documented.

The sampling will be conducted by a Julian Materials, LLC Construction Project Manager and processed at Endyne, Inc. using approved EPA methods.

The results of all benchmark monitoring will be submitted to the Agency using a Discharge Monitoring Report (DMR). The samples results will be sent to the Agency no more than 60 days after sampling took place. A sample DMR and a copy of all monitoring reports will be kept in Appendix E of this document.

If the average of the first four monitoring results is less than the benchmark value, then the benchmark monitoring requirement has been met for the term of the permit. If the average of the four samples exceeds the benchmark value then the SWPPP will be reviewed and corrective actions taken as described in section 3.2.2.4 of the general permit.

7.3 Effluent Limitations

One effluent limitation grab sample is required from the discharge at S/N003 in accordance with the following limits. This sample shall be taken after quarry dewatering occurs.

Parameter	Benchmark Cutoff Concentration
Total Suspended Solids	100 mg/L
pH	6.0 – 9.0

7.4 Monitoring Associated with Discharges to Impaired Waters

No additional monitoring for impaired water standards are required for this site, as there are no discharges to impaired water as identified in Vermont 303(d).

8 Compliance Evaluation

A comprehensive site evaluation will be performed every year by an authorized representative of the facility owner. This inspection will include all exposed industrial areas identified in Table 1 of Section 3.7 of this plan for evidence of stormwater pollution.

The results of the plan will be documented in a report containing at minimum: the date, the person(s) making the inspection, the scope of the inspection, observations relating to the discharge of pollutants from the facility, BMPs needing maintenance, BMPs which failed to operate as designed, locations where additional BMPs are needed, corrective actions taken, and any updates to the SWPPP. Copies of past inspection reports are kept in Appendix F.

9 Endangered Species

A site visit was performed by TCE's ecologist, Levi Keszey, PWS on January 5, 2023, during winter conditions. Based on a desktop review of the ANR Natural Resources Atlas, the Chandler Road Quarry does not pose an adverse risk to any mapped or otherwise known endangered or threatened species, or critical habitat designated under the Endangered Species Act. This site is therefore eligible for coverage under the MSGP by meeting Criteria A, as described in Appendix E of the general permit.

10 General Requirements

10.1 Record Keeping and Reporting

A copy of this SWPPP will be sent to the Stormwater Section and the original will be maintained onsite. Records pertaining to inspections, monitoring, maintenance, employee trainings, compliance evaluations, and spills will be kept onsite with the SWPPP. These records must be retained for at least five years after the expiration of the permit. This plan will be made available upon request to the Agency, operator of a municipal separate storm sewer receiving the discharge, and to the public if requested in writing to do so.

10.2 Maintaining the Updated SWPPP

This SWPPP will be amended if inspections or monitoring should indicate a deficiency, or Agency personnel determine that it is not effective at controlling stormwater pollutant discharges. The plan will also be amended if changes occur to the facilities layout or operations. A history of amendments will be kept with this plan in Section 11.

10.3 Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print): Andrew Julian **Title:** Member

Signature: _____ **Date Signed:** 7/17/2023

11 Summary of Updates

Date Plan Amended	Summary of Updates
07/13/2023	Update for MSGP Permitting

Appendix A: Non-Stormwater Discharges

Record the results of the Non-Stormwater Discharge Assessment and Certification in Worksheet 1. If evaluation of any discharge points is impossible, then the discharge points of concern and the reasons they could not be evaluated should be recorded on Worksheet 2.

Worksheet 1: Assessment and Certification of Non-Stormwater Discharges

Date of Test	Outfall	Method Used to Evaluate Discharge	Test Results	Potential Sources	Person or Party Conducting the Test
6/30/2023	S/N-001	Visual	No evidence of non-stormwater discharge	Access Road, Parking Area	TCE, Inc.
6/30/2023	S/N-002	Visual	No evidence of non-stormwater discharge, clear surface runoff only	Operational Areas, Access Road, Parking Area	TCE, Inc.
6/30/2023	S/N-003	Visual	No evidence of non-stormwater discharge, TSS Meter Reading at 50 mg/L	Operational Areas, Quarry, Buildings	TCE, Inc.

CERTIFICATION

I Colen Johnson, P.E. (responsible corporate official) certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name & Official Title	Area Code and Telephone No.
Colen Johnson, P.E.	802-879-6331
Signature	**Date Signed** 07/17/2023

A

Worksheet 2: Non-Stormwater Discharge Failure to Certify Notification

Outfall Not Tested/Evaluated	Why Certification is Infeasible	Potential Sources of Non-Stormwater Pollution

CERTIFICATION

I _____ (responsible corporate official) certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name & Official Title	**Area Code and Telephone No.**
Signature	**Date Signed**

A

Appendix B: Routine Facility Inspections

Keep records of all routine facility inspections here. A sample inspection form has been included.

Routine Facility Inspection Form

Date: _____ Completed by: _____

Area Checked	Checked for...	Problems? Y	Problems? N	If yes, describe	Corrective Actions to be Taken	Schedule for Corrective Actions

Appendix C: Employee Training Records

Keep a sign in sheet for each employee training session your facility holds and retain them with this SWPPP.

Refresher Course Employee Sign-In Sheet

Date	Employee Name	Employee Signature

C

Appendix D: Quarterly Visual Monitoring Inspection Forms

Keep the completed inspection forms with the SWPPP here.

Quarterly Visual Inspection Form

Inspections at each outfall should be made within the first 30 minutes of the runoff event.
Observations should note color, odor, turbidity, solids, foam, oil sheen, or any other obvious form of contamination.

Date/ Time	Outfall	Weather Conditions	Observations	Probable Sources of contamination	Action Taken to Prevent in Future

Date Completed: _____ **Complete by:** _____

D

Appendix E: Analytical Monitoring Reports

Results of your site's benchmark, effluent limitation, and impaired waters monitoring should be kept in this section of the SWPPP.

Storm Event Data

Information on the storm events sampled should be recorded here. This information does not need to be submitted to the Agency, but should be available upon request.

Monitoring Period: ______________ to ______________
MO/DAY/YEAR MO/DAY/YEAR
Date of Storm Event: ______________ Type of Monitoring: ______________
MO/DAY/YEAR Effluent limitation/ Benchmark
Storm Duration : ______________ Total Precipitation: ______________
Hours Inches
Time Since Last Measurable Storm Event: ______________
Hours or Days

Monitoring Period: ______________ to ______________
MO/DAY/YEAR MO/DAY/YEAR
Date of Storm Event: ______________ Type of Monitoring: ______________
MO/DAY/YEAR Effluent limitation/ Benchmark
Storm Duration : ______________ Total Precipitation: ______________
Hours Inches
Time Since Last Measurable Storm Event: ______________
Hours or Days

Monitoring Period: ______________ to ______________
MO/DAY/YEAR MO/DAY/YEAR
Date of Storm Event: ______________ Type of Monitoring: ______________
MO/DAY/YEAR Effluent limitation/ Benchmark
Storm Duration : ______________ Total Precipitation: ______________
Hours Inches
Time Since Last Measurable Storm Event: ______________
Hours or Days

Monitoring Period: ______________ to ______________
MO/DAY/YEAR MO/DAY/YEAR
Date of Storm Event: ______________ Type of Monitoring: ______________
MO/DAY/YEAR Effluent limitation/ Benchmark
Storm Duration : ______________ Total Precipitation: ______________
Hours Inches
Time Since Last Measurable Storm Event: ______________
Hours or Days

Monitoring Period: ______________ to ______________
MO/DAY/YEAR MO/DAY/YEAR
Date of Storm Event: ______________ Type of Monitoring: ______________
MO/DAY/YEAR Effluent limitation/ Benchmark
Storm Duration : ______________ Total Precipitation: ______________
Hours Inches
Time Since Last Measurable Storm Event: ______________
Hours or Days

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MSGP	*Vermont Multi-Sector General Permit*	Permit Number:
	Discharge Monitoring Report (DMR)	SIC Code(s):
		Outfall Number:
	Facility Name:	Sample Date:

Benchmark Monitoring **Monitoring Year:** **Quarter:** ☐ **Jan – Mar** ☐ **Apr – Jun** ☐ **Jul – Sept** ☐ **Oct - Dec**

Parameter	Cut-off Concentration (mg/L)	Sample Result (mg/L)

Effluent Limitation Monitoring *(additional space is available on the back)*

Parameter	Sample Type *(circle one)*	Limitation (mg/L)	Sample Result (mg/L)
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		

Impaired Waters Monitoring

Parameter	Cut-off Concentration (if applicable)	Sample Value

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:		Phone Number:	
Signature:		Date:	

Effluent Limitation Monitoring (continued)

Parameter	Sample Type *(circle one)*	Limitation (mg/L)	Sample Result (mg/L)
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		
	1x year / Daily Max		
	30 day avg / Monthly avg		

Notes:

Instructions

- A separate DMR form must be submitted for each outfall sampled at your facility.
- List monitoring results for the type(s) of sampling you are reporting in the appropriate section. If your sampling event was used to satisfy more than one type of monitoring (e.g. Effluent Limitation and Benchmark monitoring) you may submit results for each type using the same form.
- For benchmark monitoring, be sure to indicate which quarter the sample was taken in.
- For effluent limitations, the permit may specify that a single grab sample is adequate, or that a daily maximum and a 30 day or monthly average is necessary. Circle the kind of value that you are reporting under the "Sample Type" heading.
- Write additional information about the sample collection and processing in the notes section, such as if the samples were taken more than 30 minutes after the start of discharge and the reason for the delay.
- Keep a copy of your DMR onsite with the SWPPP.
- DMR's must be sent to the Vermont Water Quality Division within 60 days of the sampling event at the following address:

Attn: MSGP Coordinator
Water Quality Division
103 South Main Street
Building 10 North
Waterbury, Vermont 05671-0408

E

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Appendix F: Comprehensive Site Compliance Evaluation

Annual Compliance Evaluation Report for
_____ *(FACILITY NAME)*

Name of Person(s) completing evaluation: _____

_____

_____

Date of evaluation: _____

Weather conditions during inspection: _____

Areas inspected during evaluation:
Inspect all exposed areas of the facility for evidence of contamination of runoff. Areas that need to be inspected include:

- industrial materials, residue or trash that may have or could come into contact with stormwater
- leaks or spills from industrial equipment, drums, tanks and other containers
- offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site
- tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas
- evidence of, or the potential for, pollutants entering the drainage system
- evidence of pollutants discharging to surface waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring.
- Structural stormwater management measures
- erosion control measures
- any equipment necessary to implement the SWPPP (e.g. spill response equipment)

Inspectors must consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Stormwater BMPs identified in your SWPPP must be observed during active operation, i.e., during a stormwater runoff event, to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations must be inspected.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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Evidence of Stormwater Pollution

As each of the areas above is investigated, look for the problems listed in the table below. The existence of these problems on the site may indicate that the SWPPP is not being followed or that it is inadequate for preventing stormwater pollution. Should these problems be present, describe their nature and location(s) and create a plan to prevent their reoccurrence.

Is there evidence of the following problems?	Yes	No	Describe problem and location	Corrective Actions	Schedule for corrective actions
Industrial materials, residue, or trash coming in contact with stormwater					
Leaks or spills from industrial equipment, drums, tanks or other containers					
Offsite tracking of industrial or waste materials, or sediment where vehicles exit or enter the site					
Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas					
Evidence of, or the potential for the pollutants entering the drainage system					
Evidence of pollutants discharging to receiving waters at facility discharge points					
Scouring around facility discharge points, or any other degradation of these structures					

Structural Best Management Practices

Structure	Is maintenance needed? (Y/N)	Does it function as expected? (Y/N)	Describe the problem	Corrective actions to be taken	Schedule for completion

F

Are there any new sources of potential stormwater pollutants not previously identified in the SWPPP? YES / NO

If you circled yes, how will the SWPPP be modified to prevent these sources from contaminating runoff? _____

_____

_____

_____

_____

Have either visual inspections or monitoring during the past year indicated pollution of stormwater which have not yet been addressed? YES / NO

If so, describe the potential sources of any pollutants found in runoff _____

_____

What actions or modifications to the SWPPP are needed to prevent these pollutants from reaching the receiving waters? _____

_____

_____

_____

_____

Describe any other places where the site inspection indicates noncompliance with the SWPPP and the conditions of the general permit _____

_____

_____

What other changes to the SWPPP are needed to ensure that the site is in compliance? ____

_____

_____

_____

_____

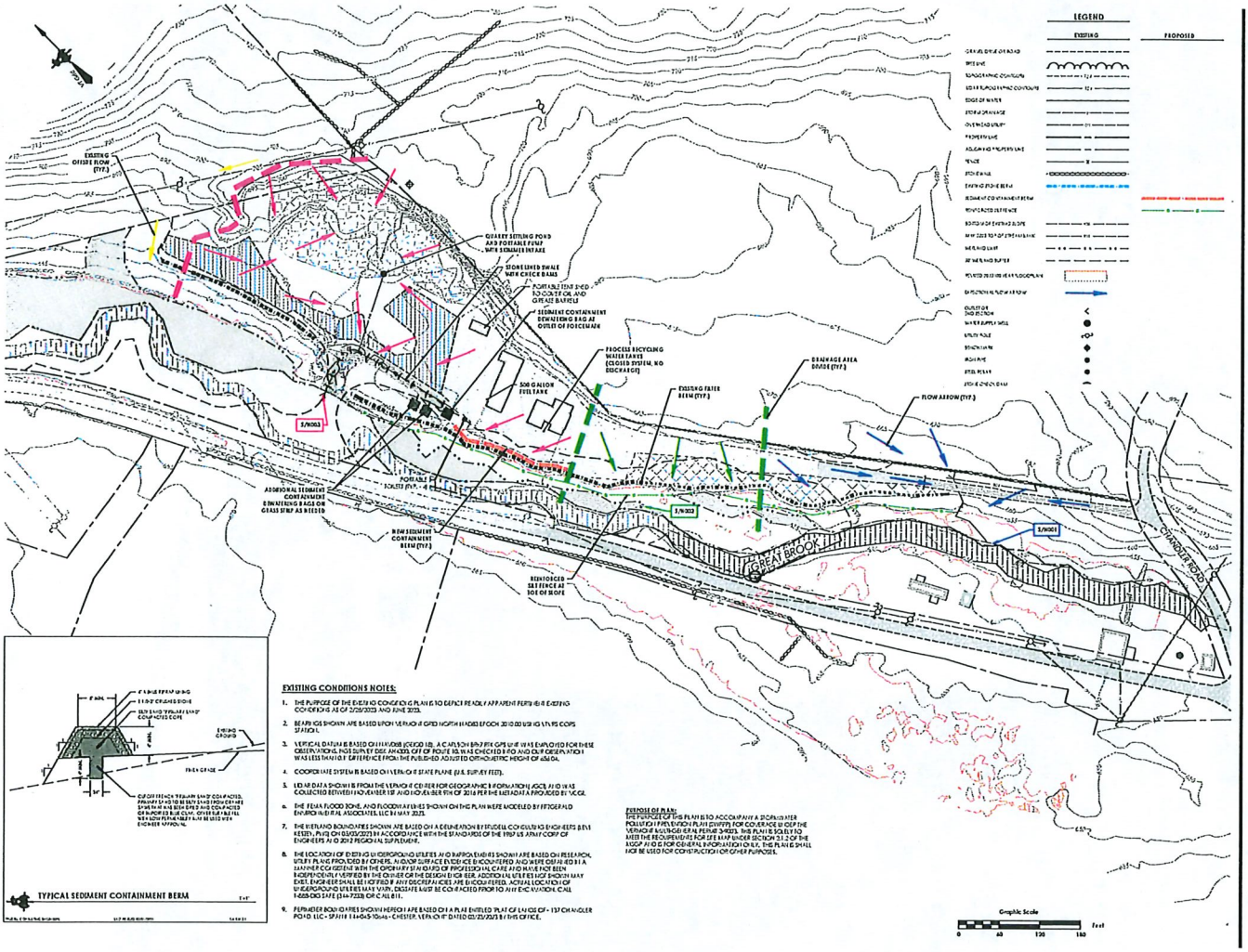
_____

Certification of Compliance

This Compliance Evaluation Report has been prepared by qualified personnel who properly gathered and evaluated information submitted for this Report. The information in this Report, to the best of my knowledge, is accurate and complete. After inspection of all exposed industrial areas, BMPs, and stormwater systems, and review of the SWPPP and required monitoring I find that this facility is in compliance with the SWPPP and the permit.

Name (print):_____ Title: _____

Signature: _____ Date: _____



EXISTING CONDITIONS NOTES:

1. THE PURPOSE OF THE EXISTING CONDITIONS PLAN IS TO DEPICT READILY APPARENT FEATURES OF EXISTING CONDITIONS AS OF 5/30/2023 AND JUNE 2023.
2. BEARINGS SHOWN ARE BASED UPON VERMONT GRID NORTH (NAD83 EPOCH 2010.00 USING LEVEL COPS STATION).
3. VERTICAL DATUM IS BASED ON NAVD88 (GEOID 18). A CARLSON BRX7 RTK GPS UNIT WAS EMPLOYED FOR THESE OBSERVATIONS. PAST SURVEY DISCREPANCIES OFF OF ROUTE 103 WAS CHECKED 3 FOOT AND OUR OBSERVATION WAS LESS THAN 0.5' DIFFERENCE FROM THE PUBLISHED ADJUSTED ORTHOMETRIC HEIGHT OF 654.06.
4. COORDINATE SYSTEM IS BASED ON VERMONT STATE PLANE (U.S. SURVEY FEET).
5. LIDAR DATA SHOWN IS FROM THE VERMONT CENTER FOR GEOGRAPHIC INFORMATION (VCGI) AND WAS COLLECTED BETWEEN NOVEMBER 1ST AND NOVEMBER 9TH OF 2016 PER THE METADATA PROVIDED BY VCGI.
6. THE FEMA FLOOD ZONE AND FLOODWAY LINES SHOWN ON THIS PLAN WERE MODELED BY FITZGERALD ENVIRONMENTAL ASSOCIATES, LLC IN MAY 2023.
7. THE WETLAND BOUNDARIES SHOWN ARE BASED ON A DELINEATION BY RUDDELL CONSULTING ENGINEERS & DEVELOPERS, PLLC ON 5/30/2023 IN ACCORDANCE WITH THE STANDARDS OF THE 1987 US ARMY CORP OF ENGINEERS ATLANTIC AND GULF COASTAL PLAIN REGIONAL SUPPLEMENT.
8. THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS SHOWN ARE BASED ON RESEARCH, UTILITY PLANS PROVIDED BY OTHERS. IN ADDITION, SURFACE EVIDENCE ENCOUNTERED AND WERE OBTAINED IN A MANNER CONSISTENT WITH THE OPERATIVE STANDARDS OF PROFESSIONAL CARE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE DESIGN PROFESSIONAL. ADDITIONAL UTILITIES NOT SHOWN MAY EXIST. ENGINEER SHALL BE NOTIFIED IF ANY DISCREPANCIES ARE ENCOUNTERED. ACTUAL LOCATION OF UNDERGROUND UTILITIES MAY VARY. DIGSAFE MUST BE CONTACTED PRIOR TO ANY EXCAVATION. CALL 1-888-DIG SAFE (344-7233) OR CALL 811.
9. PERIMETER BOUNDARIES SHOWN HEREON ARE BASED ON A PLAT ENTITLED "PLAT OF LANDS OF - 137 CHANDLER ROAD LLC - SPRING HAVEN - CHESTER, VERMONT" DATED 02/20/2023 BY THIS OFFICE.

PURPOSE OF PLAN:
THE PURPOSE OF THIS PLAN IS TO ACCOMPANY A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR COVERAGE UNDER THE VERMONT AGENCY OF NATURAL RESOURCES 3-9020. THIS PLAN IS SCALED TO MEET THE REQUIREMENTS FOR SITE MAPS UNDER SECTION 51.2 OF THE MSGP 3-9010 FOR GENERAL INFORMATION ONLY. THE PLANS SHALL NOT BE USED FOR CONSTRUCTION OR OTHER PURPOSES.

tce
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Allstone Vermont
VT 103
Chester, VT

Chandler Road
SWPPP Plan

C4-301

C4-301 Chandler Road SWPPP Plan

4 of 5 45

45 46

Duplicate?

~~5074~~ 24 and 25 1176 1458

#4 and #5 IMG_7461

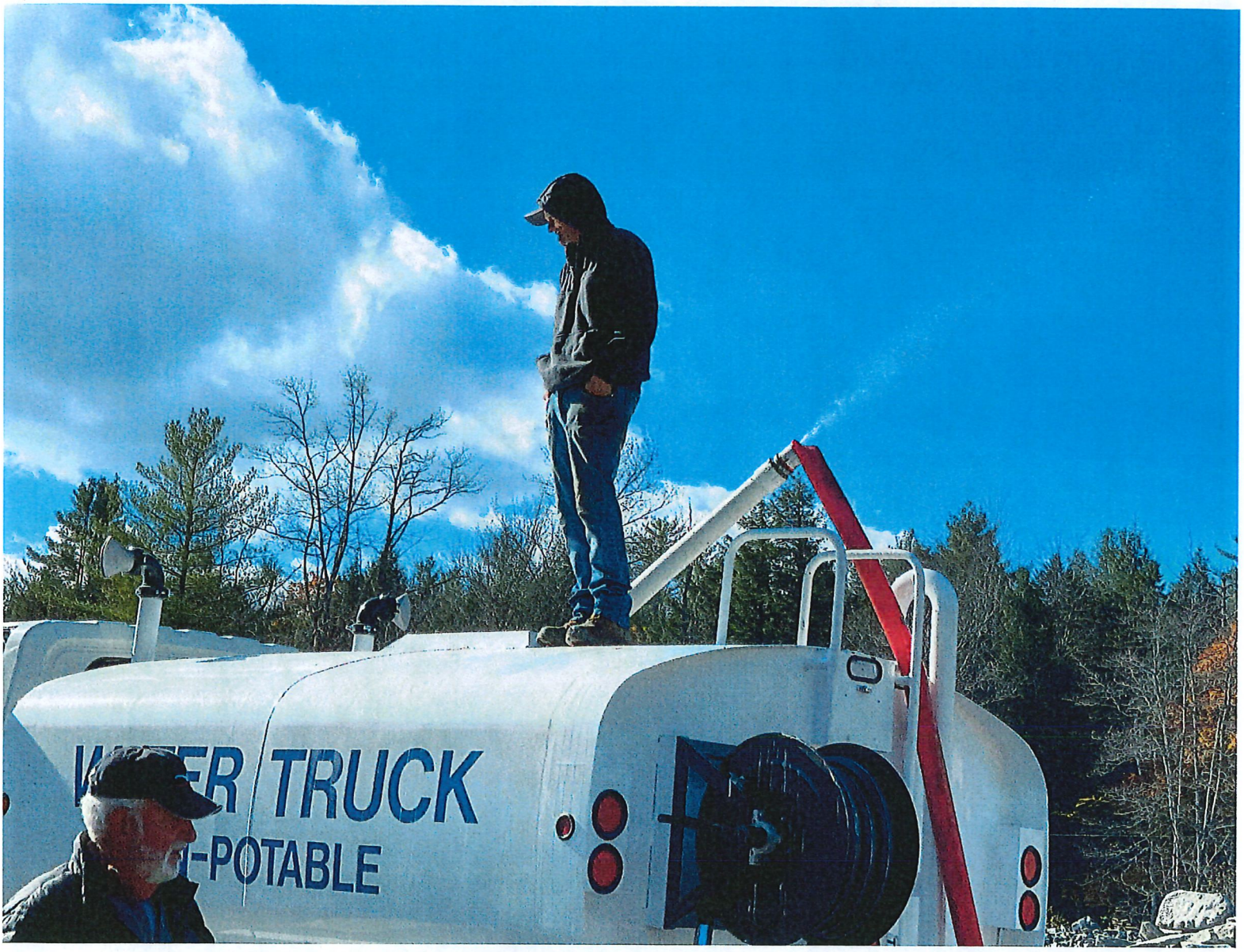
4+5 51

IMG_0220.JPG


445 53

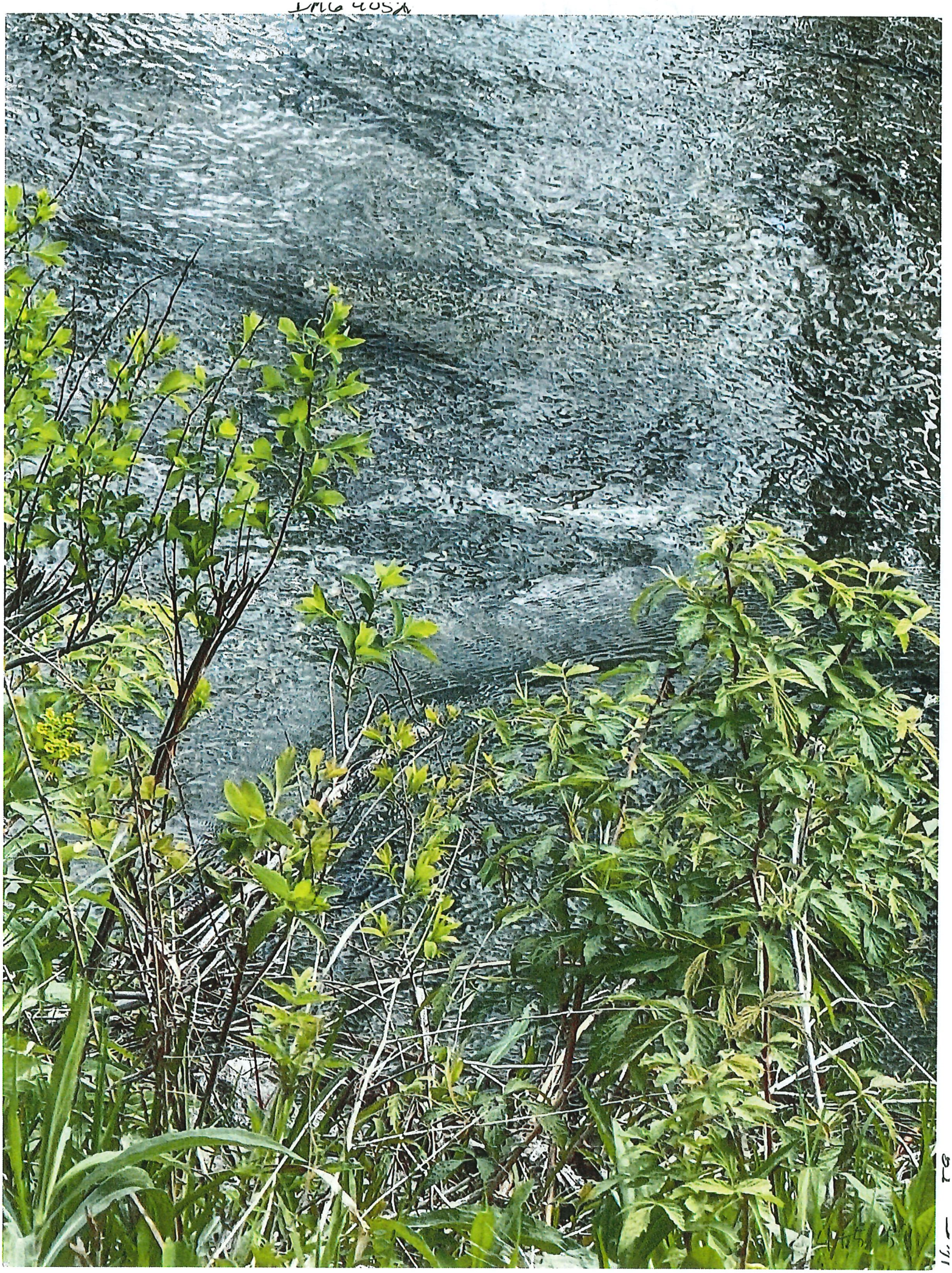
IMG_1913

IMG_1918 4



IMG - 4045

HMG 4061



IMG-4053

IMG 4005

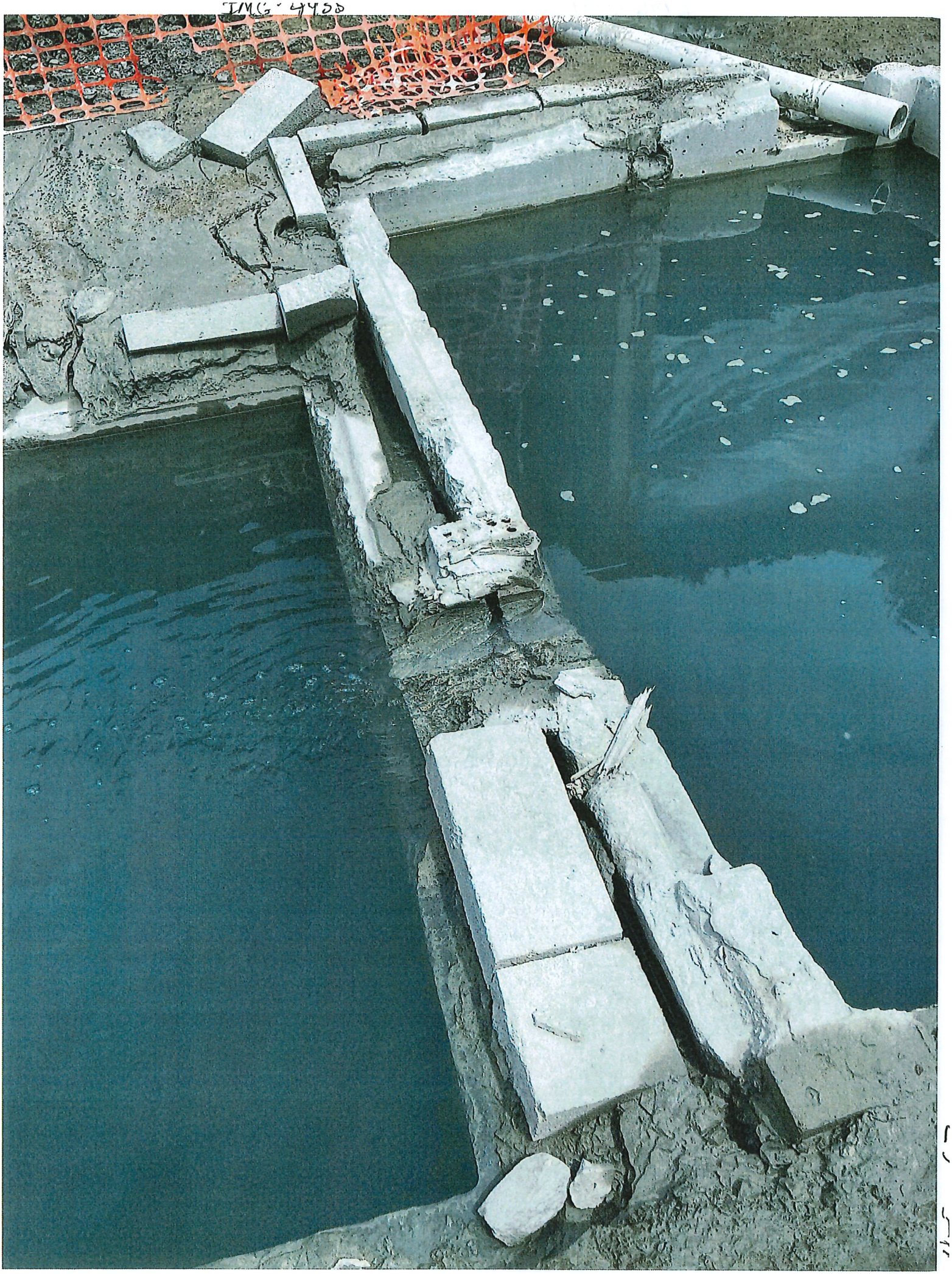
IMG 4100


WA470
JULIAN

IMG 4230

IMG_4'26?

IMG_4455

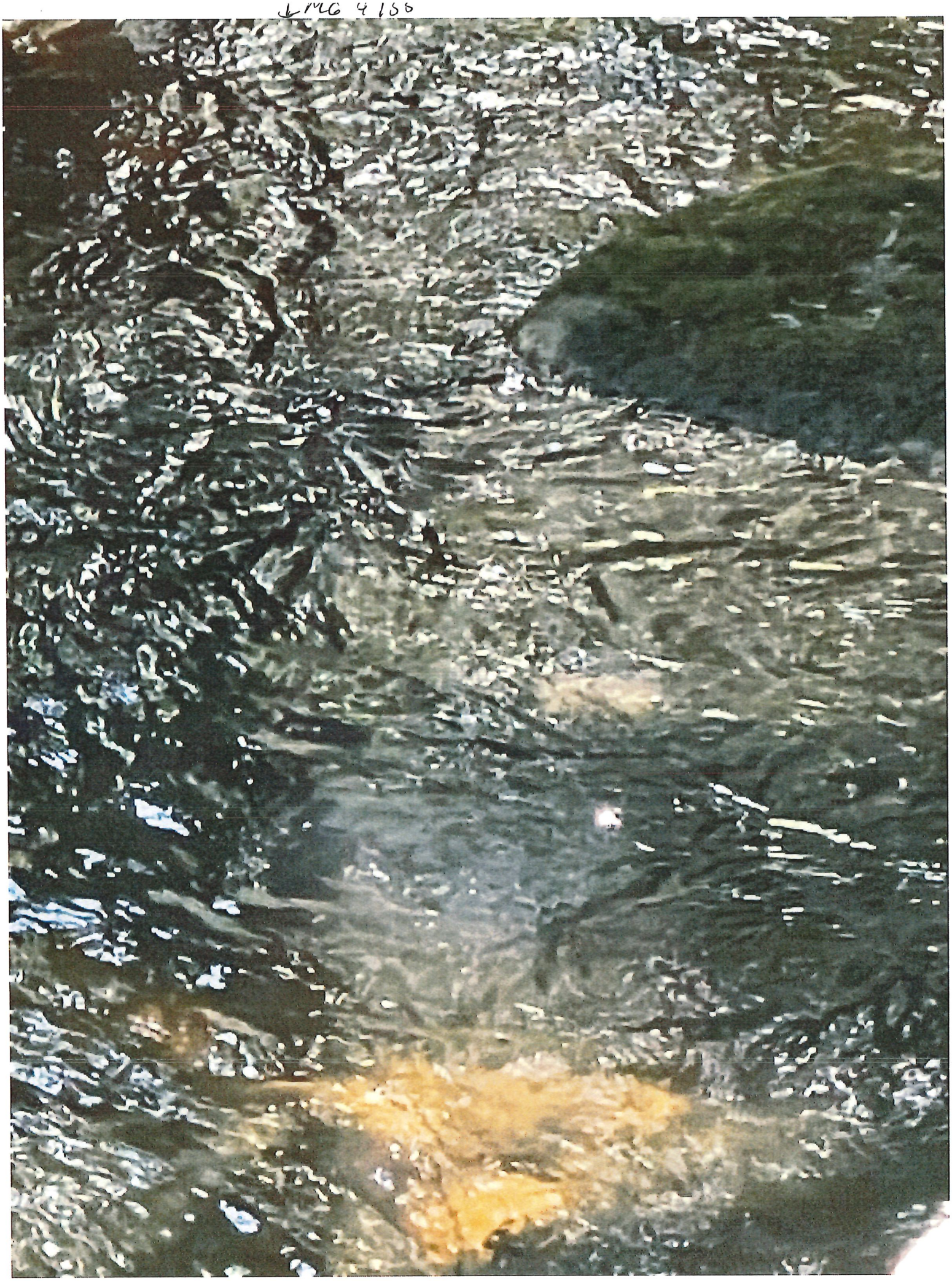


IMG 4523 1


DEAN BRI K RD 1420

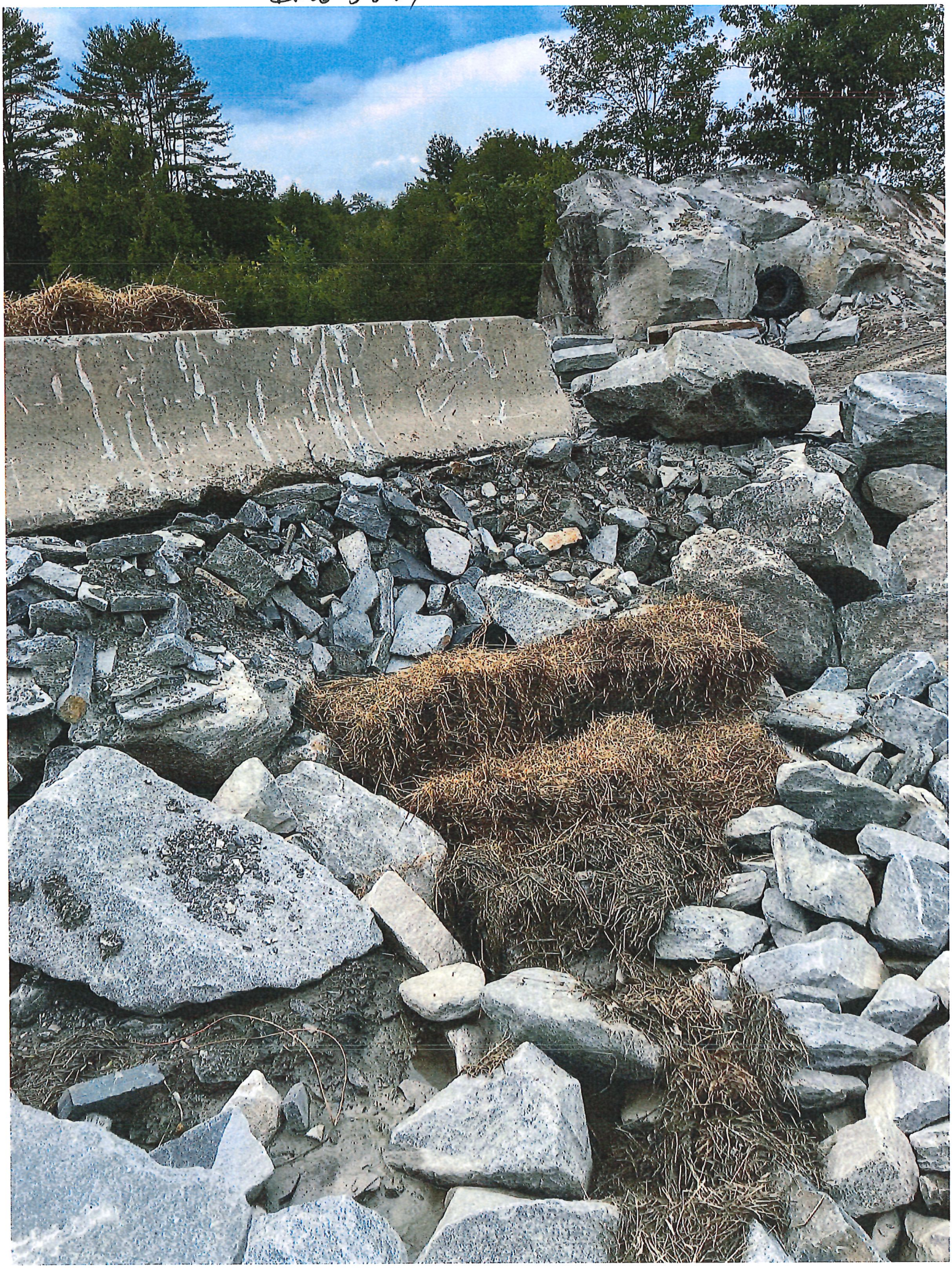
IMG_4016

↓IMG 4155



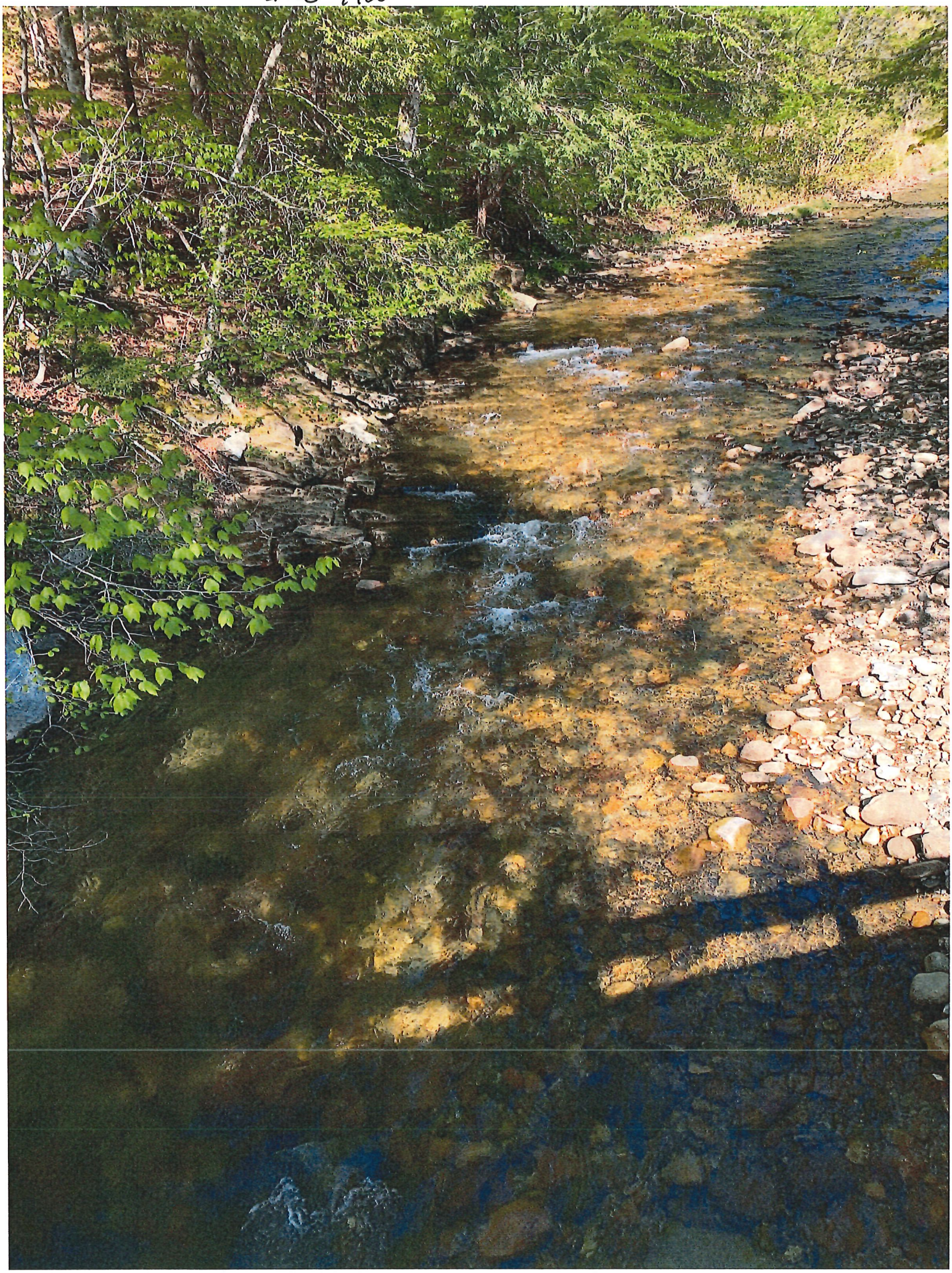
KOMATSU
KOMAT

IMG 5897



IMG 5898

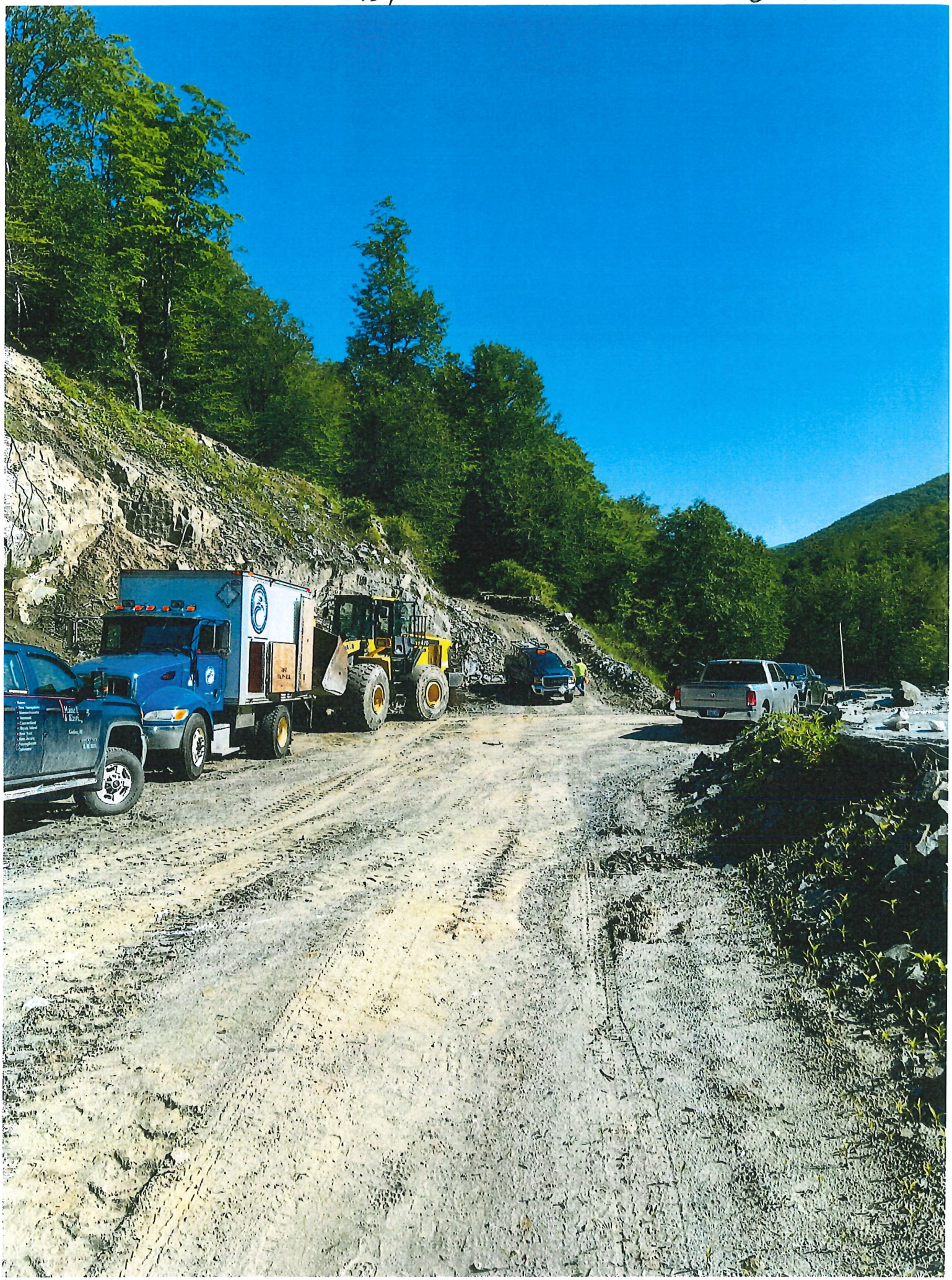
IMG 7900



SUBPOENA RESPONSE #6

IMG 7457

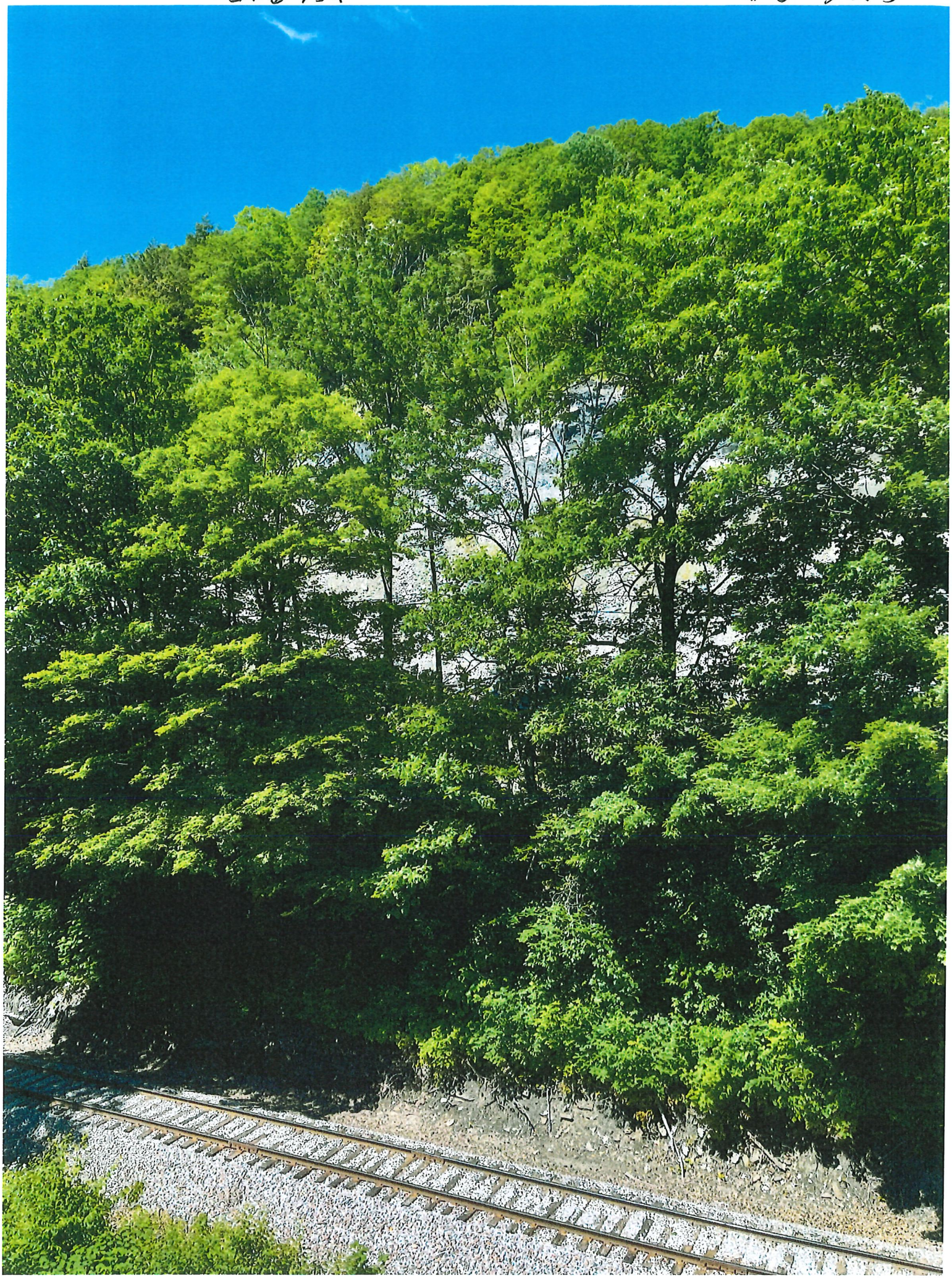
6 - 1 of 5



Item (96)

#6 2 of 5

IMG 7511 #6 5 of 5



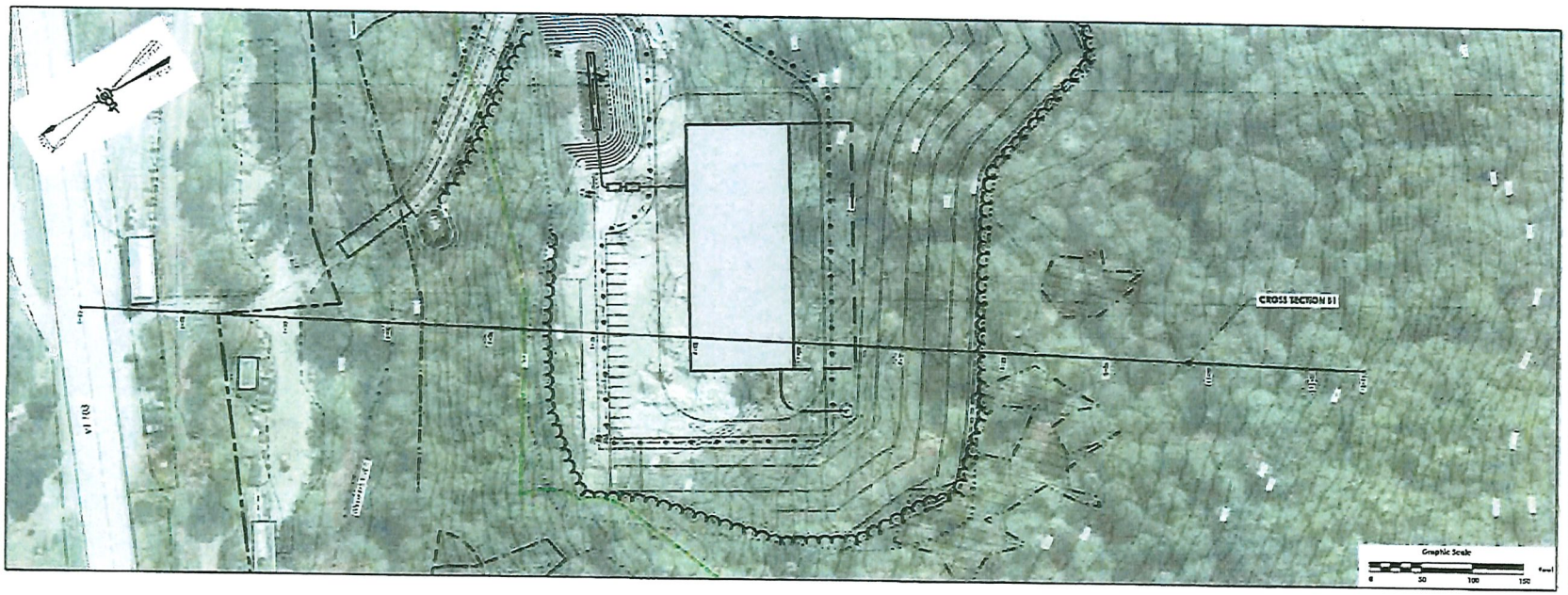
IMG 7628

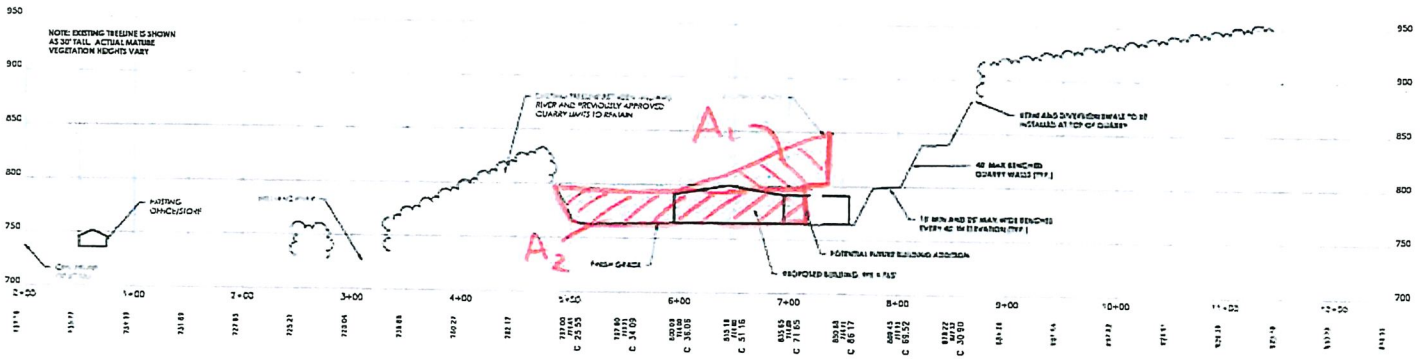
#6 4 of 5

IMG 7634

#6 5 of 5

SUBPOENA RESPONSE #8





$$A_1 = \left(\frac{120' \times 45'}{2}\right) \times 400' = 1{,}080{,}000 \text{ FT}^3 / 27 = 40{,}000 \text{ cy}$$

$$A_2 = 220' \times 400' \times 35' = 3{,}080{,}000 \text{ FT}^3 / 27 = 114{,}074 \text{ cy}$$

$$V_{\text{Cut Volume}} = A_1 + A_2 = 40{,}000 + 114{,}074 = 154{,}074 \text{ cy} \approx 155{,}000 \text{ cy}$$

(A)

Volume Calc
JM 10/17/23

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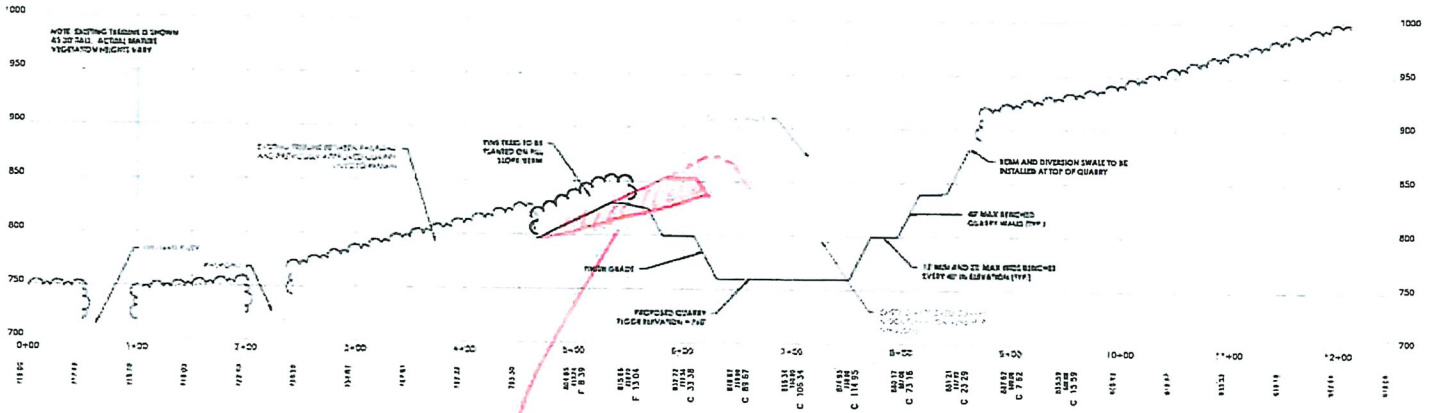
For Local Permitting Only

Allstone Vermont
VT 103
Chester, VT

South Quarry Cross Sections

C6-101



Temp storage Berm
≈ 75,000 cy

±3200FT² x 1FT/27 = 118.5 cy/LF
633 LF of Berm

Vol = 633 LF x 118.5 cy/LF = 75,010 cy

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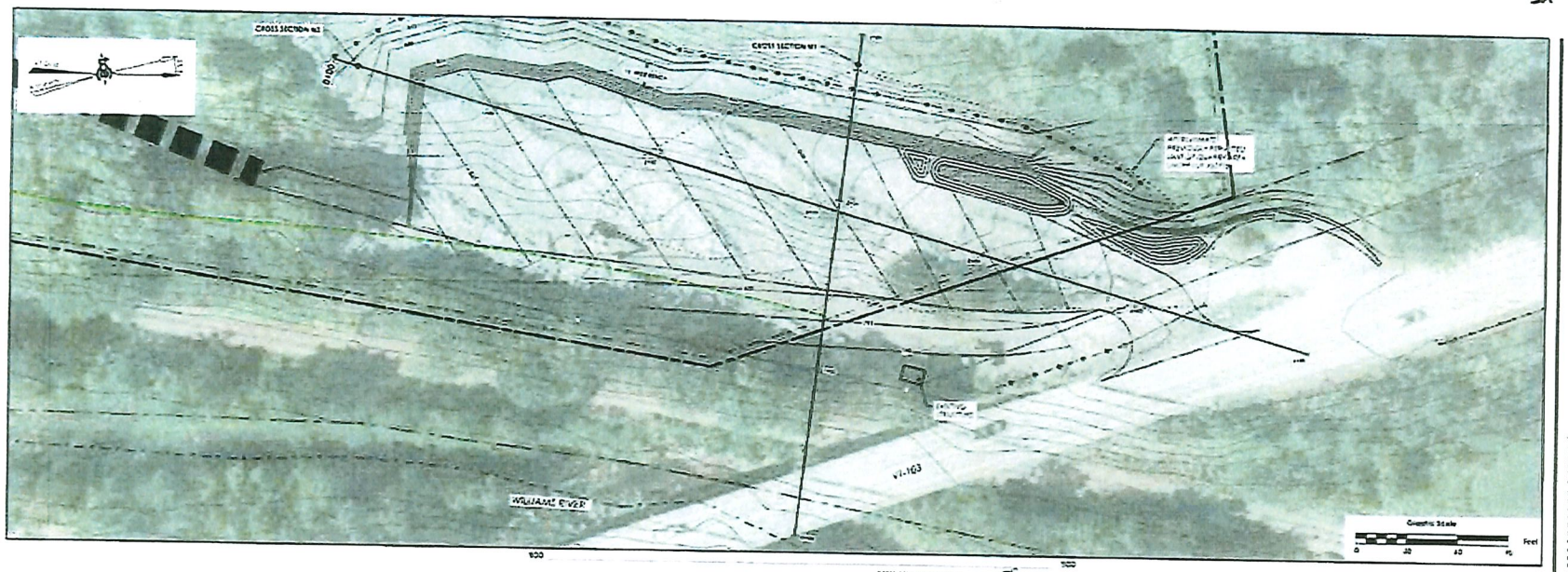
Allstone Vermont
VT 103
Chester, VT

South Quarry
Cross Sections

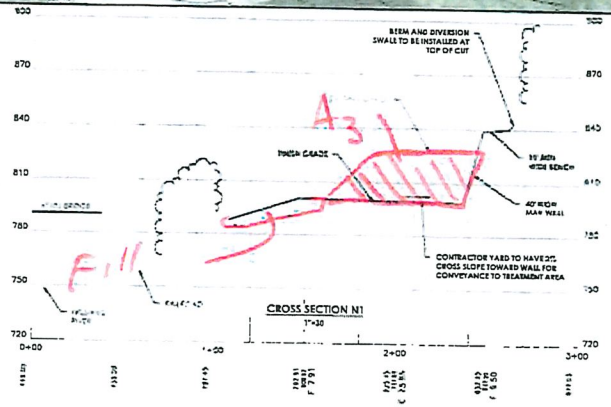
C6-102

(B)
Vol Calc
JM
10/17/23

#8 3 of 3

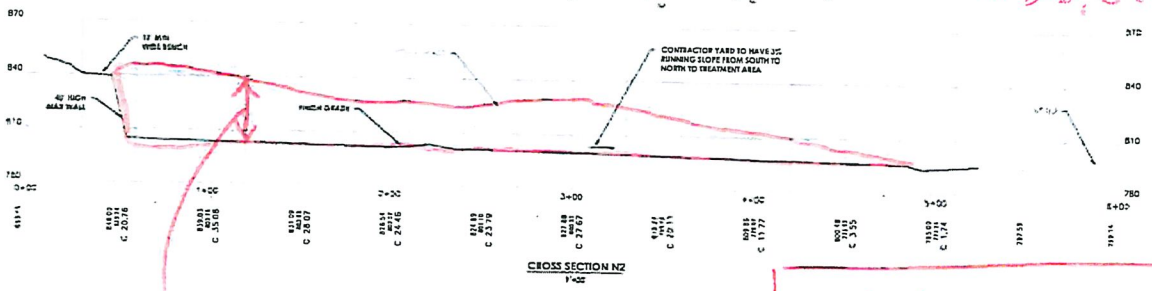


NOTE: EXISTING TREELINE IS SHOWN AS 30' TALL. ACTUAL VEGETATION HEIGHTS VARY



A_3

Fill



$A_3 = 25' \times 65' = 1625\ FT^2$

$V = 1625\ FT^2 \times 430\ FT$

$= 698,750\ FT^3 / 27$

$= 25,879\ CY$

Ave Depth ≅ 22' Use 25'

Cut ≅ 26,000 CY

fill ~ 1,000 CY

net cut 25,000 CY

tce

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For Local Permitting Only

Allstone Vermont
VT 103
Chester, VT

North Quarry
Cross Sections

C6-201

(C)
Vol Calc
JM
10/17/23

SUBPOENA RESPONSE #12

#12 1 of 5

Joann Geary

From: Sheila McIntyre <Sheila.McIntyre@tcevt.com>
Sent: Monday, June 12, 2023 11:31 AM
To: Mark G. Hall
Cc: Colen Johnson, PE; Jeremy Matosky, P.E.
Subject: FW: 22-270 JE Allstone Chester, VT Wetland File #2017-130

Hi Mark,

Below is the first email I received from ANR Compliance regarding my request from the Wetlands Program.

I will forward the remaining information.

Sheila

From: Brooks, Dale <Dale.Brooks@vermont.gov>
Sent: Tuesday, March 21, 2023 5:04 PM
To: Sheila McIntyre <Sheila.McIntyre@tcevt.com>
Cc: Follensbee, Julie <Julie.Follensbee@vermont.gov>
Subject: RE: 22-270 JE Allstone Chester, VT Wetland File #2017-130

Good afternoon,

Julie Follensbee forwarded your request for information regarding this property. I am responding with any records that are applicable to your request that are from the Environmental Compliance Division (ECD).

You will receive an email from dale.brooks@vermont.gov and have the subject line "VT DEC Public Records Request: 22-270 JE Allstone Chester, VT Wetland File #2017-130". There will be a link for you to download the request records in that email.

If you have any questions or issues with the download, please let me know.

Regards,

Dale Brooks | Administrative Services Coordinator
Vermont Agency of Natural Resources | Department of Environmental Conservation
Environmental Compliance Division | Environmental Enforcement
1 National Life Dr, Davis 3 | Montpelier, VT 05620-3803
802-828-1254 HQ | 802-461-5293 - Mobile
dec.vermont.gov/enforcement

To report an environmental violation or find more information, please visit: https://dec.vermont.gov/enforcement.

Written communications to and from state officials regarding state business are considered public records and may be subject to public scrutiny.

The Agency of Natural Resources supports telework, and there are times when I may be working from another office location. I am available to connect by phone and email. I am also available to connect in-person upon request.

From: Follensbee, Julie <Julie.Follensbee@vermont.gov>
Sent: Tuesday, February 14, 2023 10:38 AM
To: Brooks, Dale <Dale.Brooks@vermont.gov>
Subject: FW: 22-270 JE Allstone Chester, VT Wetland File #2017-130

Hello Dale,
I have a request for information regarding this property. It is associated with 15EC00215. Can you follow up with Sheila as appropriate and cc me so I know what was shared?
I will let her know what the wetland jurisdictional status is and that my review was related to a complaint investigation.
Regards,
Julie

Julie Follensbee (she/her) | District Wetlands Ecologist
Vermont Department of Environmental Conservation
Watershed Management Division, Wetlands Program
Davis 3, 1 National Life Dr | Montpelier, VT 05620-3901
802-490-6175 (office)
https://dec.vermont.gov/watershed/wetlands

From: Sheila McIntyre <Sheila.McIntyre@tcevt.com>
Sent: Tuesday, February 7, 2023 4:05 PM
To: Follensbee, Julie <Julie.Follensbee@vermont.gov>; Bean, Kelcie (she/her) <Kelcie.Bean@vermont.gov>
Cc: Jeremy Matosky, P.E. <Jeremy.Matosky@tcevt.com>
Subject: RE: 22-270 JE Allstone Chester, VT Wetland File #2017-130

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.
Hi Julie,

The current operators are seeking our assistance with numerous design and permitting tasks and during our due diligence I noted a wetland project number. If there is any wetland related history to the site (previous delineations, mapping, permits, or violations) it's always helpful to understand that history from the start. If there is no permit and (hopefully) no wetland violation, then any prior mapping or classifications would still be useful.

Thanks for what you can offer,

Sheila

From: Follensbee, Julie <Julie.Follensbee@vermont.gov>
Sent: Tuesday, February 7, 2023 3:59 PM
To: Sheila McIntyre <Sheila.McIntyre@tcevt.com>; Bean, Kelcie (she/her) <Kelcie.Bean@vermont.gov>
Cc: Jeremy Matosky, P.E. <Jeremy.Matosky@tcevt.com>
Subject: RE: 22-270 JE Allstone Chester, VT Wetland File #2017-130

Hi Sheila,
I won't be able to research the file until next week probably. Are you looking for wetland presence/classification information or something else? As Kelcie noted, there is not a permit associated with this property.
Julie

Julie Follensbee (she/her) | District Wetlands Ecologist
Vermont Department of Environmental Conservation
Watershed Management Division, Wetlands Program

Davis 3, 1 National Life Dr | Montpelier, VT 05620-3901
802-490-6175 (office)
https://dec.vermont.gov/watershed/wetlands

From: Sheila McIntyre <Sheila.McIntyre@tcevt.com>
Sent: Tuesday, February 7, 2023 12:59 PM
To: Bean, Kelcie (she/her) <Kelcie.Bean@vermont.gov>
Cc: Follensbee, Julie <Julie.Follensbee@vermont.gov>; Jeremy Matosky, P.E. <Jeremy.Matosky@tcevt.com>
Subject: RE: 22-270 JE Allstone Chester, VT Wetland File #2017-130

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.
Always appreciate your help Kelcie!

Julie if there are any documents you can share, I'd appreciate your input and perspective on the history of this site.

Thanks!

Sheila

From: Bean, Kelcie (she/her) <Kelcie.Bean@vermont.gov>
Sent: Tuesday, February 7, 2023 12:52 PM
To: Sheila McIntyre <Sheila.McIntyre@tcevt.com>
Cc: Follensbee, Julie <Julie.Follensbee@vermont.gov>
Subject: RE: 22-270 JE Allstone Chester, VT Wetland File #2017-130

Hi Sheila,

It looks like this project is potentially associated with a violation. There are no permits being pursued, nor have any been issued for this project.

It's one of Julie's, so I've copied her here to provide info, since I'm not sure what I can or cannot share.

Thank you,

Kelcie Bean (she/her)

You may now submit permit applications, compliance reports and fee payments through our online form to expedite its receipt and review: ANR Online Intake Form

VERMONT

Kelcie Bean (she/her), Environmental Technician
Vermont Agency of Natural Resources | Department of Environmental Conservation
Watershed Management Division | Business & Operation Support Services (BOSS)
1 National Life Drive, Davis 3 | Montpelier, VT 05620-3522
802-490-6195 (o/c) | Kelcie.bean@vermont.gov
http://dec.vermont.gov/watershed

The Agency of Natural Resources supports telework, and I work primarily remotely. I am available to connect by phone and email.

From: Sheila McIntyre <Sheila.McIntyre@tcevt.com>
Sent: Monday, February 6, 2023 3:30 PM
To: Bean, Kelcie (she/her) <Kelcie.Bean@vermont.gov>
Subject: 22-270 JE Allstone Chester, VT Wetland File #2017-130

Hi Kelcie,

I am looking into a site: the Glimmerstone Granite Quarries, located at 3646 Route 103N and 137 Chandler Road in Chester, Vermont. The ANR Atlas indicates there was a wetland project number #2017-130. Is it possible to obtain copies of what the Wetlands Program has on file? Any background you can offer would be greatly appreciated!

If I should direct this inquiry elsewhere, just let me know.

Thank you!

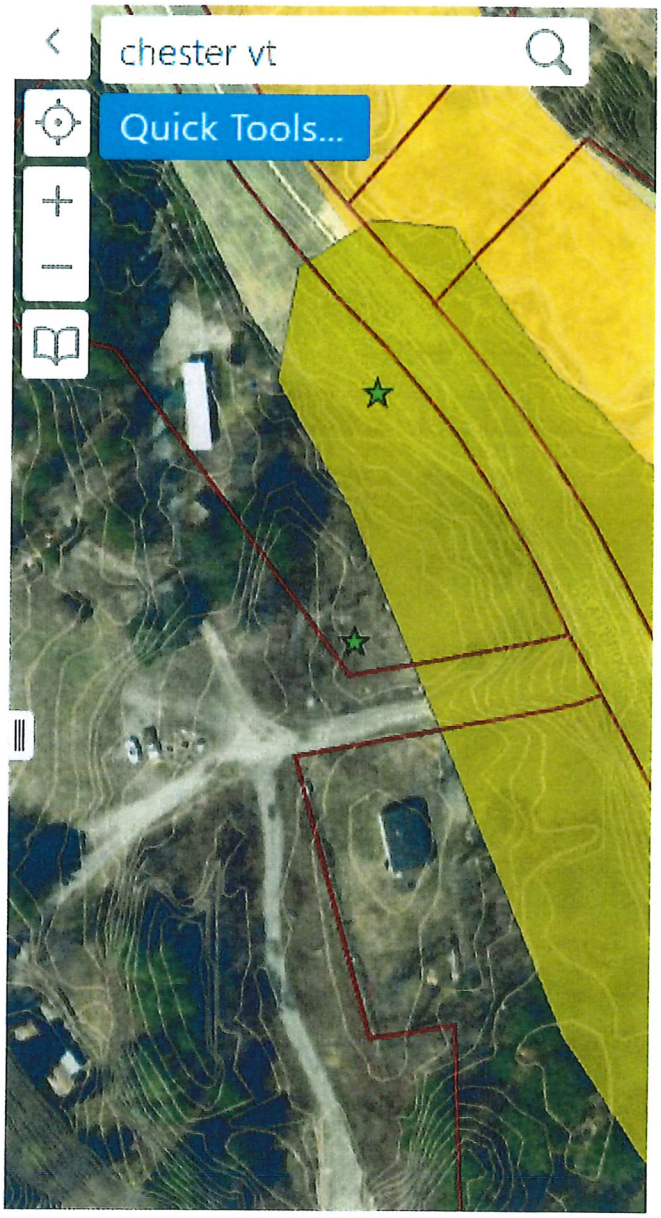
Wetland Project: 2017-130

Description

Project Number: 2017-130
Last Interaction Date:

Details

Project Number
2017-130



Sheila McIntyre
Senior Environmental Planner

e. Sheila.McIntyre@tcevt.com
p. 802.879.6331 x116 | c. 802.578.2937

478 Blair Park Road, Williston, VT 05495
42 Mapleville Depot, St. Albans, VT 05478

tcevt.com

Please note I work Monday – Thursday and am often in the field for extended periods. I may not be able to respond to your emails immediately. Thank you for your patience!