STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION ACTIVITIES TERRAN R TEST COMPLEX

RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI 39529



Relativity Space Inc. Stennis Space Center, Mississippi 39529

March 2025

TABLE OF CONTENTS

1.0	STORM	1 WATER POLLUTION PREVENTION PLAN DEVELOPMENT	5
	1.1	Property Information	5
2.0	EROSI	ON AND SEDIMENT CONTROLS AND SOIL STABILIZATION REQUIREMENTS	6
	2.1	Control Storm Water Volume	7
	2.2	Control Storm Water Discharges	7
	23	Minimize Soil Exposure	7
	2.5	Minimize Disturbance of Steen Slones	7
	2.1	Minimize Distandance of Steep Slopes.	7
	2.5	Buffor Doquiromonts	/ Q
	2.0	Minimize Coil Composition	.0
	2.7	Charge Water Filtration and Infiltration	ŏ
	2.8	Storm water Filtration and Infiltration	
	2.9	I ransport on Steep Slope	
	2.10	Cut and Fill Volumes	8
	2.11	Iracking of Sediment on Vehicles	8
	2.12	Minimize Discharges from Washing Activities	9
	2.13	Discharge from Other Industrial Activity	9
	2.14	Stormwater Sources from Other than Construction	10
	2.15	Temporary Structures in Waters of the State	10
3.0	BEST N	MANAGEMENT PRACTICES	10
510	3 1	Venetation Practices	10
	5.1	3 1 1 Buffer Zones	11
		3 1 2 Toncoil	11
		2.1.2 Hopson Equipment Lice in Do Vegetated Areas	11
	2 2	Structural Dracticoc	11
	5.2	2.2.1 Sodimont Pacing	17
		2.2.2 Change Clange	12
		3.2.2 Steep Slopes	12
		3.2.3 Construction Entrances and Exits	12
		3.2.4 Storm Drain Inlet Protection	13
		3.2.5 Perimeter Controls	13
		3.2.6 Phasing	13
	3.3	Discharges to 303(d) Streams	13
	3.4	Post Construction Control Measures	13
	3.5	Responsible Parties	14
4.0	HOUSE	EKEEPING PRACTICES	14
	4.1	Sweeping and Removal of Sediment	15
	4.2	Waste Hauling and Disposal	15
	4.3	Construction Dewatering Requirements	15
	4.4	Storm Water Discharges	16
5.0	FLUCC	ULAN I APPLICATION	10
6.0	SITE M	1AP	16
7.0	IMPLE	MENTATION SEQUENCE AND CONTROL	17

8.0	MAINT 8.1	ENANCE AND INSPECTION SCHEDULE Suspension of Inspections	17 18
9.0	NON-S	TORM WATER DISCHARGE MANAGEMENT	20
10.0	FINAL	STABILIZATION	21
11.0			~~
11.0	11.1	Pre-Construction Activities	22 22
	11.2	Storm Water Pollution Prevention Plan Amendment	23
	11.3	Erosion and Sediment Controls	24
12.0	RESPO	NSIBLE OFFICIAL REQUIREMENTS	24
	12.1	Duly Authorized Representative	25
13.0	Staff T	raining Requirements	25

TABLES

Table 8-1	Inspection Table	18
Table 8-2	Maintenance Table	18
Table 11-1	SWPPP Amendment Scenarios	23
Table 13-1	Pollution Prevention Team	26

APPENDICES

Appendix A	Permit Forms

Appendix B Figures

Record of Construction Storm Water Pollution Prevention Plan Review Amendments								
	Relativity Space Inc – Stennis Space Center, Mississippi							
Date	Reviewer	Section	Amendments	Responsible Party Initials				
February 2022	EnSafe	Plan Development		EnSafe, Relativity				
August 2023	Relativity	1.0, 1.1, 8.1, 10.1, 11.2, 13.0, Appendix A	Include updated discussions on added land disturbance acreage. Included updated forms in Appendix A.	Relativity				
March 2025	Relativity	1.1, 2.15, 3.1, 3.2.3, 4.3, 11.1, 11.2, 13.0 Appendix A, Appendix B	Include updated discussions added land disturbance acreage. Updated the Pollution Prevention team Included updated forms in Appendix A and Appendix B.	Relativity				

1.0 STORM WATER POLLUTION PREVENTION PLAN DEVELOPMENT

MDEQ Large Construction General Permit ACT5 T-1: *SWPPP DEVELOPMENT:* A site-specific SWPPP shall be developed requiring the design, installation, implementation and maintenance of effective pollution prevention measures by each owner or operator subject to this permit. A SWPPP shall be prepared in accordance with sound engineering practices and shall identify potential sources of pollution, which may reasonably be expected to affect the quality of storm water discharges associated with construction activity. The SWPPP shall describe and ensure the implementation of specific best management practices for the project site, which will reduce pollutants in storm water discharges and assure compliance with the terms and conditions of this permit. [11 Miss. Admin. Code Pt. 6, R. 1]

Relativity Space Inc (Relativity) requires permit coverage for discharges of storm water from regulated construction activity, disturbing more than five acres, into state waters. Mississippi Department of Environmental Quality (MDEQ) has issued the Large Construction General Permit, MSR10, to permit such activities. MSR10, ACT5 requires the development of a Storm Water Pollution Prevention Plan (SWPPP).

In general, this SWPPP follows the regulatory requirements as indicated by ACT5 of MSR10; these regulations are incorporated throughout this SWPPP for guidance and ease of reference. This Plan was written based on the site development and controls established by the Erosion Control Plan. (Appendix B).

1.1 Property Information

Relativity manufactures rockets for commercial orbital launch services at their Los Angeles, California, facilities. At Stennis Space Center in Mississippi, Relativity conducts various engine testing activities at a number of test complexes (E2 test complex; Terran R test complex). Relativity's operational activities at Stennis Space Center consists of configuration of space flight hardware and test infrastructure design, and engine/stage testing. Since the last SWPPP update, Relativity has substantially completed construction and activation of a 2-bay engine test stand for Relativity's Terran R rocket within the "hockey stick" shaped parcel known as the Terran R test complex (Site). Relativity is continuing design on an upper stage (Stage 2) testing facility, and site/civil plans for construction of a Composite Overwrapped Pressure Vessel (COPV) test stand within the site. Ongoing construction activities at the site are associated with activation of test stands, construction of bulk storage areas for gas storage tanks, construction of ancillary buildings, and construction of connecting roads. Proposed test stands will be located approximately 1,500 feet northeast of the E4 test complex and approximately 1,600 feet south of Saturn Drive. The previously approved area of land that was estimated to be disturbed within the site under Relativity's existing Large Construction Notice of Intent (LCNOI) was reported to be 25.08 acres. Although, with the added scope for construction of the COPV test stand, it is

anticipated that an additional 1.93 acres of groundwork would be required at the site, of which includes 1.66 acres of added wetland disturbances.

2.0 EROSION AND SEDIMENT CONTROLS AND SOIL STABILIZATION

REQUIREMENTS

MDEQ Large Construction General Permit ACT5 T-2 and 3: *Erosion and Sediment Controls and Soil Stabilization Requirements:* The SWPPP shall list and describe site-specific controls appropriate for the construction activities as well as the procedures for implementing such controls. Controls shall be designed to retain sediment on-site and to minimize the discharge of pollutants. If any of the below controls cannot be implemented on the project site, the SWPPP must include written justification as to why site-specific constraints and/or costs make the control(s) infeasible. At a minimum, such controls must be designed, installed and maintained to:

- (1) Control storm water volume and velocity within the site to minimize soil erosion;
- (2) Control storm water discharges, including both peak flow rates and total storm water volume, to minimize channel and stream bank erosion and scour in the immediate vicinity of discharge points;
- (3) Minimize the amount of soil exposed during construction activity;
- (4) Minimize the disturbance of steep slopes.
- (5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
- (6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. Direct storm water to vegetated areas and maximize storm water infiltration to reduce pollutant discharges, unless infeasible; and
- (7) Minimize soil compaction and, unless infeasible, preserve topsoil;
- (8) Direct storm water to vegetated areas, brush barriers, silt fences, check dams, etc. to aid in the filtration, infiltration, velocity reduction and diffusion of the discharge;
- (9) Transport runoff down steep slopes through lined channels or piping;
- (10) Minimize the amount of cut and fill;
- (11) Minimize off-site vehicle tracking of sediments; and
- (12) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, concrete wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
- (13) Provide a description of any discharge associated with industrial activity other than construction stormwater that originates on site and the location of that activity and its permit number.
- (14) Provide a description of stormwater sources from areas other than construction and a description of controls and measures that will be implemented at those sites.
- (15) When permanent or temporary structures will be placed in Waters of the State, MDEQ may require the applicant to address any issues related to Mississippi Antidegradation Plan in the SWPPP during the review of the LCNOI rather than requiring a separate LCNOI or other state required permits. This provision will only apply to activities that will not require a 404 permit or a 401 certification. [11 Miss. Admin. Code Pt. 6, R. 1]

Per ACT5, T-2 there are a minimum of fifteen controls that must be implemented at the property. For any of the fifteen controls that are not incorporated, justification is provided as required.

2.1 Control Storm Water Volume

(1) Control storm water volume and velocity within the site to minimize soil erosion;

Stabilization is required when velocities exceed 6 feet per second or when grades exceed 2%. Per the Erosion Control Plan, stabilization measures shall be swale check dams located along the culvert that runs through the center of the construction site. Check dams will also be installed in the new drainage swale associated with construction of the COPV test stand, as shown on the COPV Erosion Control Plan.

2.2 Control Storm Water Discharges

(2) Control storm water discharges, including both peak flow rates and total storm water volume, to minimize channel and stream bank erosion and scour in the immediate vicinity of discharge points;

Silt fences will be constructed around the perimeter of the construction site to minimize channel and stream bank erosion and scour in the immediate vicinity of the discharge point.

2.3 Minimize Soil Exposure

(3) Minimize the amount of soil exposed during construction activity;

Relativity will only disturb the soil necessary for development of the site.

2.4 Minimize Disturbance of Steep Slopes

(4) Minimize the disturbance of steep slopes;

MSR10 defines steep slopes as 3:1 and any areas of the property that fit this definition must be labeled on the site map. There are no slopes steeper than 3:1; therefore this section is not applicable.

2.5 Minimize Sediment Discharges

(5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;

The Erosion Control Plan outlines several erosion and sediment controls to be implemented; including stabilized construction access, gravel-filled, permeable bags check dams, and silt fences. Figures in Appendix B shows and describes the erosion and sediment controls present, as applicable, for each area of the property and the contributing disturbed area.

2.6 Buffer Requirements

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer. Direct storm water to vegetated areas and maximize storm water infiltration to reduce pollutant discharges, unless infeasible; and

The discharge point from the property is located 2.74 miles (15,000) feet northeast of the Pearl River. Drainage from COPV construction will discharge towards the southeast into nearby wooded areas within the watershed of the Pearl River. Disturbed areas will be bordered by silt fence for sediment control and there is over 500 feet of undisturbed natural buffer before stormwater reaches a tributary of the Pearl River.

2.7 Minimize Soil Compaction

(7) Minimize soil compaction and, unless unfeasible, preserve topsoil;

The property is being developed with concrete in targeted areas; compaction will be used in areas beneath the concrete. Outside of areas designed for building development and any other use, topsoil will be preserved as possible.

2.8 Storm Water Filtration and Infiltration

(8) Direct storm water to vegetated areas, brush barriers, silt fences, check dams, etc. to aid in the filtration, infiltration, velocity reduction and diffusion of the discharge;

All drainage areas will, at a minimum, utilize silt fences to control sediment. No drainage area on the property is without at least one erosion and sediment control measure.

2.9 Transport on Steep Slope

(9) Transport runoff down steep slopes through lined channels or piping;

There are no steep slopes on the property; therefore, this section is not applicable.

2.10 Cut and Fill Volumes

(10) Minimize the amount of cut and fill;

Cut and fill practices will be utilized at the site, however where possible, Relativity will minimize the cut and fill.

2.11 Tracking of Sediment on Vehicles

(11) Minimize off-site vehicle tracking of sediments; and

The Erosion Control Plan specifies that the construction entrances shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. To do so, the

entrance will be equipped with 3-inch crushed aggregate on geotextile fabric on both ends with steel plates in between in order to stabilize construction access. Stabilized construction access is detailed in the Figures in Appendix B.

Ultimately, all sediment spilled, dropped, washed, or tracked onto paved surfaces will be removed immediately.

2.12 Minimize Discharges from Washing Activities

(12)Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, concrete wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.

When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on an area stabilized with plastic lining, steel-wire stakes, and three-string straw bale as specified in the Erosion Control Plan. All sediment shall be prevented from entering watercourse using approved methods; such as diverting water through the check dams.

2.13 Discharge from Other Industrial Activity

(13) Provide a description of any discharge associated with industrial activity other than construction stormwater that originates on site and the location of that activity and its permit number.

Relativity is currently conducting periodic industrial wastewater discharges to a tributary of the Pearl River under NPDES Permit MS0062677. The existing permit covers industrial wastewater discharges associated with deluge water used to cool the engine flame diverter during space vehicle engine and stage component testing. Intake water for the deluge cooling system is provided by NASA's on-site fire-water supply. Tested engines are fueled using methane and liquid oxygen, therefore, regulated contaminants are not present in the engine fuels.

Discharges associated with the existing permit occur on a batch basis, with each discharge ranging from approximately 0.960 to 0.128 MG. The current permitted maximum discharge volume is 0.198 MGD. Batch discharges occur multiple times per month depending on testing cadence. Discharge flowrates are measured by differential pressure readings from the supply water tower that services the deluge system. Based on the current understanding of engine testing activities, approximately 20% of the deluge is converted to steam during testing. Up to 15 batch discharges currently occur per month, but in the future there may be up to 30 batch discharges per month.

2.14 Stormwater Sources from Other than Construction

(14) Provide a description of stormwater sources from areas other than construction and a description of controls and measures that will be implemented at those sites.

Due to the location of the construction site, it is not likely that any other stormwater sources will affect the site.

2.15 Temporary Structures in Waters of the State

(15) When permanent or temporary structures will be placed in Waters of the State, MDEQ may require the applicant to address any issues related to Mississippi Antidegradation Plan in the SWPPP during the review of the LCNOI rather than requiring a separate LCNOI or other state required permits. This provision will only apply to activities that will not require a 404 permit or a 401 certification. [11 Miss. Admin. Code Pt. 6, R. 1]

Based on review of the U.S. Fish and Wildlife Service National Wetlands Inventory Wetlands Mapper and a Wetland Delineation report Relativity had prepared for the site, 0.26 total acres of wetlands was originally planned to be disturbed during construction of the Terran R test complex. Relativity has received approval from the Mississippi Department of Marine Resources for a Wetlands Permit and U.S. Army Corps of Engineers Section 404 documentation for this 0.26-acre portion of the site. An application was sent and received on Wednesday, February 9th, 2022. Construction of this access road as been completed since the previous approval of this SWPPP.

Notwithstanding, an additional 1.66 acres of wetlands is anticipated to be impacted with the proposed construction of the COPV test complex. The COPV project area is a currently forested wetland area. The wetlands were determined as jurisdictional during a past wetland determination with a PJD #MVK-2022-883 issued by the U.S. Army Corps of Engineers on January 17, 2023. A Coast Use Permit was issued through MDMR #DMR23-000677 on February 6, 2024. This permit was withdrawn to allow the project to go through NASA's GP53 permitting process. Figures within Appendix B show the regional location of the project area. Relativity currently has an agreement to purchase 17.4 wetland credits from Wetlands Solutions' Devil's Swamp Mitigation Bank in order to offset the clearing and filling of 1.66 acres of forested pine savannah wetlands. Coordination with the U.S. Army Corps of Engineers, Vicksburg District has been initiated to secure approvals on the Section 404 permitting effort.

3.0 BEST MANAGEMENT PRACTICES

3.1 Vegetation Practices

MDEQ Large Construction General Permit ACT5 T-4: The number and type of BMPs included in the SWPPP must reflect the specific conditions of the construction site. An effective SWPPP includes a combination of BMPs that are designed to work together. A combination of BMPs is listed below and must be included as minimum components of a SWPPP. These controls must be in accordance with the design standards set forth in the most current edition of Mississippi's "Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban

Areas"

found

at

http://deq.state.ms.us/MDEQ.nsf/page/NPS_PlanningandDesignManual2ndEd_Vol1?OpenDocument or other accredited and approved manual of design.

(1) Vegetative Practices shall be designed to preserve existing vegetation where feasible and initiate vegetative stabilization measures after land disturbing activities. Such practices may include, but not limited to, temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, tree protection and topsoil preservation.

Soil stabilization-vegetative stabilization measures must be initiated whenever any clearing, grading, grubbing, excavating or other land disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period of fourteen (14) calendar days or more. The appropriate temporary or permanent vegetative practices shall be initiated immediately. For purposes of this permit, "immediately" is interpreted to mean no later than the next work day. If you are unable to meet the deadlines in the previous paragraph due to circumstances beyond your control, and you are using vegetative cover for temporary or permanent stabilization, you may comply with the following stabilization deadlines instead:

- A) Immediately initiate, and within 14 calendar days complete, the installation of temporary non-vegetative stabilization measures to prevent erosion;
- B) Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and,
- C) Document the circumstances that that prevent you from meeting the deadlines required and the schedule you will follow for initiating and completing stabilization.

Permanent sediment and erosion control measures including vegetation are to be considered include converting current vegetation to permanent features and seeding.

3.1.1 Buffer Zones

MDEQ Large Construction General Permit ACT5 T-5: Specific BMPs that must be included, unless infeasible: (A) Buffer zones (see Definitions) shall be maintained between land-disturbing activities and perennial water bodies. A minimum 150-foot buffer zone is recommended; however, if a 150-foot buffer zone cannot be met, the requirements outlined in ACT5, T-3(6) shall be followed.

Refer to Section 2.6 of this SWPPP for details on the proposed buffer zones to be maintained.

3.1.2 Topsoil

(B) Topsoil should be stockpiled and used in areas that will be re-vegetated. When final grade is reached it should be distributed to a minimum depth of 2 inches on 3:1 slopes and 4 inches on flatter slopes.

Topsoil will not be stockpiled onsite due to no areas on site needing to be re-vegetated.

3.1.3 Heavy Equipment Use in Re-Vegetated Areas

(c) Heavy equipment use in areas to be re-vegetated should be avoided. If compaction cannot be avoided, the top 4 inches of the soil bed should be tilled before re-vegetation. Any necessary fertilizer or other soil amendments should be added during the tilling process.

No heavy equipment will be used to re-vegetate onsite.

3.2 Structural Practices

MDEQ Large Construction General Permit ACT5 T-6: (2) Structural practices shall divert flows from exposed soils, store flows or otherwise limit runoff from exposed areas. Such practices may include, but are not limited to, construction entrance/exit, silt fences, earth dikes, brush barriers, drainage swales, check dams, subsurface drains,

pipe slope drains, level spreaders, drain inlet protection, outlet protection, detention/retention basins, sediment traps, temporary sediment basins or equivalent sediment controls.

Section 2 lists all the structural practices to be implemented on the property, including construction entrance/exit, silt fences, and check dams.

MDEQ also lists six specific practices that must be included in the construction plans, unless infeasible.

3.2.1 Sediment Basins

(A) For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site. Sediment basins must be installed before initial site grading and utilize outlet structures that withdraw water from the surface and that are designed for a minimum 2-year, 24-hour storm event. If flocculants are being introduced, sediment basins must be downstream of the point of introduction and include baffles to increase sediment removal efficiency and turbidity reduction.

Due to the unique characteristics of linear projects (see Definitions), such as the lack of space within project rights of way and having multiple, distributed discharge points, sedimentation basins are not common practices. Therefore, MDEQ will not require the use of sedimentation basins for linear projects disturbing ten (10) or more acres at one time. Appropriate alternate structural practices, such as sediment traps and check dams, must be included in the SWPPP if sediment basins are deemed infeasible.

No sediment basins will be used, only dry retention areas as shown on the Erosion Control Plan. Less than 10 acres will be disturbed at one time, at all times.

3.2.2 Steep Slopes

MDEQ Large Construction General Permit ACT5 T-7: (D) Steep Slopes (see Definition) that cannot be avoided must have, at a minimum, silt fences or equivalent sediment controls for all down slope boundaries (and for those side slope boundaries deemed appropriate by individual site conditions), unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.

There are no steep slopes on the property; therefore, this section is not applicable.

3.2.3 Construction Entrances and Exits

(E) Construction entrances/exits shall be installed wherever traffic will be leaving a construction site and moving directly onto a paved public road.

The site has three construction entrances; one coming from the existing facility south of the construction property on Propellant Boulevard accessing the western parcel; one off of Saturn Drive accessing the central portion of the site; one from the A2 test stand to the east of the site accessing the eastern parcel. As specified in Section 2.11, construction entrances shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces.

To do so, the entrances will have crushed aggregate and steel plates. Ultimately, all sediment spilled, dropped, washed, or tracked onto paved surfaces will be removed immediately.

3.2.4 Storm Drain Inlet Protection

(F) Storm Drain Inlets-Inlets that could receive storm water from construction activities shall be protected by surrounding or covering with a filter material until final stabilization has been achieved.

There are no existing storm drain inlets on site; therefore, this section is not applicable.

3.2.5 Perimeter Controls

MDEQ Large Construction General Permit ACT5 T-8: (G) Perimeter Controls-Natural areas shall be maintained and supplemented with silt fence and fiber rolls around project perimeter. If not feasible to maintain natural areas, a silt fence or similar controls, such as fiber rolls, are sufficient.

A silt fence will be constructed around the perimeter of the property. The fence will be constructed and maintained in accordance with the Erosion Control Plan (Appendix B) and the schedule presented in Section 8.

3.2.6 Phasing

(H) Phasing-Schedule or sequence construction activities so as to concentrate work in certain areas so as to minimize the amount of soil that is exposed at one time.

There is no proposed phasing or construction schedule. The entire site will be developed at one time

3.3 Discharges to 303(d) Streams

MDEQ Large Construction General Permit ACT5 T-9: (3) Facilities discharging into impaired receiving waters (i.e., receiving stream segments which are listed on MDEQ's 303(d) List of Impaired Waters or segments for which a Total Daily Maximum Load (TMDL) has been approved) must identify the pollutant of concern(s) for the receiving stream in the SWPPP. If applicable, the SWPPP shall describe how the selected BMPs will ensure that discharges from the site (if applicable) will not cause or contribute to exceedances of the water quality standards in the receiving stream.

According to the most recent publication of Mississippi's 303(d) list, The Clean Water Act Mississippi 2020 Section 303(d) List of Impaired Water Bodies¹, Pearl River is not listed as an impaired receiving water; therefore, this section is not applicable.

3.4 Post Construction Control Measures

(4) A description of any post-construction control measures. Post-construction control measures should be installed, as necessary, to control pollutants in storm water after construction is complete. These controls include, but are not limited to, one or more of the following: on-site infiltration of runoff, flow attenuation using open vegetated swales, exfiltration trenches and natural depressions, constructed wetlands and retention/detention structures. Where needed, velocity dissipation devices shall be placed at detention or retention pond outfalls and along the outfall channel to provide for a non-erosive flow.

¹ https://www.mdeq.ms.gov/water/surface-water/total-maximum-daily-load/

Permanent sediment and erosion control measures to be considered include converting construction to permanent features and seeding. However, the property is being developed with concrete; therefore, there is minimal land being disturbed that will not ultimately be included in the footprint of the proposed site.

3.5 Responsible Parties

(5) Proposed responsible parties (original coverage recipient or new owner or operator) for individual lots or outparcels that are part of a larger common plan of development or sale. If permit responsibility is retained by the original coverage recipient, a narrative description of sediment and erosion controls for subdivision lots is acceptable. Out-parcels in commercial developments must be included in the scaled site map referenced below.

Relativity is the only responsible party and does not intend to divide into out-parcels.

4.0 HOUSEKEEPING PRACTICES

MDEQ Large Construction General Permit ACT5 T-10: Housekeeping Practices:

- The owner or operator shall design, install, implement and maintain practices appropriate to prevent pollutants from entering storm water from construction sites because of poor housekeeping. These practices must be listed in the SWPPP and located on the site map.
- The owner or operator shall designate and report in the SWPPP areas for equipment maintenance and repair
 and concrete chute wash off; provide waste receptacles and regular collection of waste; provide adequately
 maintained sanitary facilities; provide protected storage areas for chemicals, paints, solvents, fertilizers,
 pesticides, herbicides, detergents and other potentially toxic materials; and implement spill and leak prevention
 practices and response procedures if spills and leaks do occur; minimize the exposure of building materials,
 building products, construction wastes, trash and landscape materials. These areas and specific potential
 pollutants shall be addressed in the SWPPP and located on the scaled site map.

Relativity shall maintain practices appropriate to prevent pollutants from entering storm water from construction sites because of poor housekeeping. Measures include, but are not limited to:

- Providing waste receptacles and regular collection of waste.
- Providing temporary sanitary facilities that will be hauled off.
- Providing protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents, and other potentially toxic materials.
- Implementing spill and leak prevention practices and response procedures if spills and leaks do occur.
- Minimizing the exposure of building materials, building products, construction wastes, trash and landscape materials to storm water.

Relativity shall conduct equipment maintenance and repair in areas of the site.

4.1 Sweeping and Removal of Sediment

- The owner or operator shall provide a description of procedures for:
 - (A) Sweeping or removal of sediment and other debris that has been tracked from the site or deposited from the site onto streets and other paved surfaces;
 - (B) Removal of sediment or other pollutants that have accumulated in/near any sediment control measures, storm water conveyance channels, storm drain inlets, or water course conveyance within the construction site, and;
 - (C) Removal of accumulated sediment that has been trapped by sediment control measures at the site, in accordance with applicable maintenance requirements covered under this permit.

As specified in Section 2.11, construction entrances shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. To do so, the entrance may have to be periodically top dressed with additional stones. Ultimately, all sediment spilled, dropped, washed, or tracked onto paved surfaces will be removed immediately. Sediment control measures and storm water conveyance channels shall be maintained as specified in Section 8.

4.2 Waste Hauling and Disposal

• The owner or operator shall also provide a description of the procedures for handling and disposing of wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

The contractor shall monitor and remove any accumulated sediment and spread onsite to dry at locations indicated by Relativity as property development evolves. All earth removed for property development, including those areas designated for interceptor swales and diversion dikes, will be disposed of in an approved spoils site.

4.3 **Construction Dewatering Requirements**

MDEQ Large Construction General Permit ACT5 T-11: *Construction Dewatering Requirements:* Comply with the following requirements to minimize the discharge of pollutants in ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation. Dewatering discharge shall be managed by BMPs.

(A) Treat dewatering discharges with controls to minimize discharges of pollutants with controls designed to prevent discharges with visual turbidity to minimize discharges of pollutants. (Appropriate controls include sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, filtration systems (e.g., bag or sand filters), other appropriate approval controls, and passive treatment systems that are designed to remove sediment. Appropriate controls to use downstream of dewatering controls to minimize erosion include vegetated buffers, check dams, riprap, and grouted riprap at outlets or other appropriate approval controls.);
(B) Do not discharge visible floating solids or foam;

(C) Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials; The discharge must not cause the formation of a visible sheen or visible hydrocarbon deposits on the bottom or shoreline of the receiving water.

(D) To the extent feasible, use vegetated, upland areas of the site to infiltrate dewatering water before discharge. Using waters of the State as part of the treatment area is prohibited;

(E) To prevent sediment discharge from causing erosion: (1) Use stable, erosion-resistant surfaces (e.g., well-vegetated grassy areas, clean filter stone, geotextile underlayment) for the discharge from dewatering controls; (2) Do not place dewatering controls, such as pumped water filter bags, on steep slopes.

(F) At all points where dewatering water is discharged, velocity dissipation BMPs must be implemented. The discharge must not cause re-suspension;

(G) With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and

(H) Replace and/or clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

Housekeeping measures and the controls implemented at this site are ultimately designed with the goal that dewatering discharge from the facility shall be free of visible floating solids, foam, oil, or grease in other than trace amount. Should Relativity find that discharges from the site are contributing larger than trace amounts of constituents listed in ACT5, T-11, sediment and erosion controls designed for the site will be reevaluated for effectiveness and to determine if additional controls are needed.

4.4 Storm Water Discharges

MDEQ Large Construction General Permit ACT7 L-1: *Non-Numerical Limitation Requirements:* Storm water discharges shall be free from:

(1) Debris, oil, scum, and other floating materials other than in trace amounts,

(2) Eroded soils and other materials that will settle to form objectionable deposits in receiving waters,

(3) Suspended solids, turbidity and color at levels inconsistent with the receiving waters

(4) Chemicals in concentrations that would cause violation of State Water Quality Criteria in the receiving waters.

Housekeeping measures and the controls implemented at this site are ultimately designed with the goal that storm water discharged from the facility shall be free of sediment, oil, floating or suspended solids, color, or scum in other than trace amount. Should Relativity find that discharges from the site are contributing larger than trace amounts of constituents listed in ACT7, L-1, sediment and erosion controls designed for the site will be reevaluated for effectiveness and to determine if additional controls are needed.

5.0 FLOCCULANT APPLICATION

MDEQ Large Construction General Permit ACT5 T-12: *Flocculant Application:* Flocculants, meeting the criteria contained in ACT8 and used in accordance with manufacturer's instructions, may be incorporated as part of an overall storm water management system. If flocculant application is proposed, the SWPPP must list the proposed flocculants to be used, describe the method, frequency and location of introduction, and identify the location of BMPs where flocculated material will settle.

There is no flocculant application proposed for the sediment basins; therefore, this section is not applicable.

6.0 SITE MAP

MDEQ Large Construction General Permit ACT5 T-13: *Prepare Scaled Site Map(s):* The owner or operator shall prepare a scaled site map showing:

- (1) Boundaries of property and proposed construction activities, noting any phasing of construction activities,
- (2) Original and proposed contours (if feasible), with steep slopes identified,
- (3) North arrow,

- (4) Drainage pattern arrows,
- (5) Location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction shall be listed in text form on the map),
- (6) Location of any storm drain inlets and any receiving MS4,
- (7) All erosion and sediment controls (vegetative and structural),
- (8) Any post-construction control measures, and
- (9) Location of housekeeping practices.

If flocculant application is proposed, the location(s) of the following items shall be marked and labeled on the site map.

- (1) Flocculant introduction point(s), and
- (2) BMPs where flocculated material will settle.

If the construction project is a linear construction project (see Definitions), a scaled site map is not required, however standard diagrams (e.g., cross sections showing dimensions and labeled components) of erosion and sediment controls to be used must be submitted.

Appendix B contains the following figures: Site Location 1-mile Quadrangle Map which depicts the site location on a USGS topographic map; Erosion Control Maps depicting structural controls and wetland boundaries for the COPV stand development; and a Civil and Construction Area and Drainage Map depicting water flow on site and outfall.

7.0 IMPLEMENTATION SEQUENCE AND CONTROL

MDEQ Large Construction General Permit ACT5 T-14: *Implementation Sequence:* The SWPPP shall outline an implementation sequence (including any phasing of construction activities), which coordinates the timing of all landdisturbing activities together with the necessary erosion and sedimentation control measures planned for the project. **T-14** *Implementation of Controls:* The SWPPP shall require the owner or operator, in disturbing an area, to implement controls as needed to prevent erosion and adverse impacts to waters of the State.

Prior to grading, silt fences, diversion swales/dikes, and construction entrances shall be in place. The construction entrances shall remain in place until project completion. Additionally, soil stabilization-vegetative stabilization measures, if needed as the majority will be permanent landscaping, will be initiated whenever any clearing, grading, grubbing, excavating or other land disturbing activities have temporarily, or permanently, ceased on any portion of the site for 14 days or more, as required.

8.0 MAINTENANCE AND INSPECTION SCHEDULE

MDEQ Baseline General Permit ACT5 T-16: Maintenance and Weekly Inspections:

- The SWPPP shall describe procedures to maintain vegetation, erosion and sediment controls and other protective measures. Procedures shall provide that all controls and outfalls/discharge points are inspected after rain events that produce a discharge and at least weekly for a minimum of four inspections per month in accordance with ACT6, S-5.
- Any poorly functioning erosion controls or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections required under this permit shall be corrected as soon as possible, but not to exceed 24 hours of the inspection unless prevented by unsafe weather conditions as documented on the inspection form.

• In the event of an unanticipated breach of a sediment basin/pond temporary containment measures shall be taken within 24 hours after the inspection. Permanent corrective measures shall be implemented within five (5) days of the inspection; however, if permanent corrective measures cannot be implemented within the timeframes provided herein the owner or operator shall contact MDEQ.

Table 8-1 specifies the inspection schedule for the controls and discharges from the site. Table 8-2 specifies the minimal sediment clean out routine for control devices (i.e., silt fence and sediment ponds).

Table 8-1 Inspection Table						
FrequencyPerformed ByCorrective Actions1Record Retention						
Controls, Outfalls, and Receiving Streams						
After Rain Events that produce a dischargeQualified Personnel2ASAP or with 24 Hours3 Years						
If no rain events, at least weekly	Qualified Personnel	ASAP or with 24 Hours	3 Years			
Monthly, the weekly inspection results shall be summarized on the <u>Site Inspection and Certification Form</u> . The monthly form is signed by a Responsible Official for the site (see Section 12)						

Notes:

- ¹ Poorly functioning erosion controls or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections to be corrected ASAP, but not to exceed 24 hours of the inspection unless prevented by unsafe weather conditions as documented on the inspection form.
- ² Qualified Personnel (MSR10 Definition): A person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

ASAP = As soon as possible

Table 8-2 Maintenance Table				
Clean Out of Sediment				
Silt Fence	Once the accumulated silt has reached a depth of 6 inches (per Erosion Control Plan).			
Check Dams	When the capacity to catch sediment has been reduced by 50%.			
Construction Entrances	When tracking sediment onto paved surfaces/roadways appears			

8.1 Suspension of Inspections

MDEQ Baseline General Permit ACT9 S-1: *Suspension of Weekly Inspections and Monthly Record Keeping:* Coverage recipients under this general permit may suspend weekly inspection and monthly record keeping requirements, if the coverage recipient certifies that:

- (1) Land-disturbing activities have temporarily ceased,
- (2) No further land-disturbing activities are planned for a period of at least six (6) months,
- (3) Areas that have been disturbed meet the definition of "final stabilization" (see Definitions), with no active erosion, and
- (4) Vegetative cover has been established.

Color photographs representative of the site must be submitted with the Inspection Suspension Form provided in the Large Construction Forms Package. The coverage recipient shall notify the MDEQ once construction activities are resumed and the weekly inspections shall commence immediately and as required in ACT6, S-5. The coverage

recipient is still responsible for all permit conditions during the suspension period and nothing in this condition shall limit the rights of the MDEQ to take enforcement or other actions against the coverage recipient.

Relativity can suspend weekly inspections and the subsequent monthly inspection record keeping requirement if all four of the following criteria are meet:

- 1. Land-disturbing activities have temporarily ceased.
- 2. No further land-disturbing activities are planned for a period of at least 6 months.
- 3. Areas that have been disturbed meet the definition of final stabilization (see Section 10) with no active erosion.
- 4. Vegetative cover has been established.

If all conditions are met, Relativity must take color photographs of site to show eligibility. These photographs and the Inspection Suspension Form must be submitted to MDEQ for approval. Relativity is still responsible for complying with all applicable permit conditions during the suspension period. Once construction activities have resumed, Relativity shall notify MDEQ and inspections will resume as required.

9.0 NON-STORM WATER DISCHARGE MANAGEMENT

MDEQ Baseline General Permit ACT5 T-17: *Non-Storm Water Discharge Management:* The SWPPP must identify all allowable sources of non-storm water discharges listed in ACT2, T-2, except for flows from actual fire-fighting activities, which are combined with storm water discharges associated with large construction activity. Non-storm water discharges should be eliminated or reduced to the extent feasible. Wash waters must be treated in a sediment basin or alternate control that provides equivalent or better treatment prior to discharge. The SWPPP must identify and ensure the implementation of appropriate Best Management Practices (BMPs) for the non-storm water component of the discharge. The Permit Board staff will review the above discharges on a case by case basis and may require the coverage recipient to apply for and obtain either an individual or an alternative general NPDES permit as provided in ACT3, S-2.

MDEQ Baseline General Permit ACT2 T-2&3:

- (1) Discharges composed entirely of storm water and allowable non-storm water discharges (see ACT5, T-14 for additional requirements) from construction activity, including clearing, grading, grubbing, excavating and other land disturbing activities of five (5) or more acres or less than five (5) acres if part of a "larger common plan of development or sale"
- (2) Allowable Non-Storm Water Discharges:
 - a. Discharges from actual fire-fighting activities
 - b. Fire hydrant flushing
 - c. Water used to control dust
 - d. Potable water sources including uncontaminated water line flushing
 - e. Routine external building wash down that does not use detergents
 - f. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used
 - g. Uncontaminated air conditioning or compressor condensate
 - h. Uncontaminated ground water or spring water
 - i. Foundation or footing drains where flows are not contaminated with process materials such as solvents
 - j. Landscape irrigation
 - K. Water used to wash vehicles, wheel wash water and other wash waters where detergents are not used.
- (3) Prohibited Non-Storm Water Discharges:
 - a. Wastewater from washout of concrete (unless managed by an appropriate control)
 - b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials
 - c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
 - d. Soaps or solvents used in vehicle and equipment washing
 - e. Wastewater from sanitary facilities, including portable toilets
 - f. Dewatering activities, including discharges from dewatering of trenches and excavations unless managed by BMPs.

Vehicle wash water is anticipated to be generated at the site as a control measure to prevent sediment being carried off the construction site and onto public thoroughfares. The construction entrances/exit have been designed, and are to be maintained, to minimize carrying sediment offsite. However, when washing is required to clean vehicles, it shall be done on an area stabilized with drainage flowing away from both the street and the stabilized entrance. All sediment shall be prevented from entering ditches or watercourse using approved methods; such as diverting water through the check dams.

MSR10 ACT2 prohibits the discharge of wash water where detergents are used; therefore, in the event where Relativity must wash vehicles, detergents will not be used unless the site captures all wash water and disposes of it offsite.

10.0 FINAL STABILIZATION

MDEQ Baseline General Permit ACT5 T-18: *Final Stabilization:* The SWPPP shall describe procedures to achieve final stabilization of all disturbed areas of the project site.

MSR10 defines final stabilization as either:

1. All soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of at least 70% for the area has been established or equivalent measures (i.e., concrete or asphalt paving, rip rap, etc.) have been employed;

or

- 2. For individual lots part of a larger common plan of development or sale in residential or commercial developments, that either:
 - a. The coverage recipient has completed final stabilization as specified in (1) above,

or

b. The coverage recipient has established temporary stabilization before another property owner assumes operational control for the property AND the coverage recipient for the larger common plan of development has provided the appropriate Notice of Intent or Registration form, the appropriate Construction General Permit, and guidance documents to the new property owner and the new owner assumes control by completing the appropriate Notice of Intent or Registration Form.

In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed if specified by the permitting authority.

10.1 Notice of Permit Termination

MDEQ Baseline General Permit ACT10 S-1: *Termination of Permit Coverage:* Within thirty (30) days of final stabilization for a covered project, a completed Request for Termination (RFT) of Coverage form (provided in the Large Construction Forms Package) shall be submitted to the Permit Board. Upon receiving the completed RFT, the MDEQ staff will inspect the site. If no sediment and erosion control problems are identified and adequate permanent controls are established, the owner or operator will receive a termination letter. Coverage is not terminated until notified in writing by MDEQ. Failing to submit a RFT is a violation of permit conditions.

Beginning December 21, 2020, the RFT must be submitted electronically as required by 40 CFR 127.16.

Within 30 days of final stabilization, as defined in Section 10, Relativity will submit the Request for Termination of Coverage form to MDEQ electronically for subsequent site inspection and termination of permit coverage notification by MDEQ.

11.0 IMPLEMENTATION REQUIREMENTS

MDEQ Baseline General Permit ACT6 S-1: *Implementation Requirements:* The coverage recipient shall:

- 1. Implement the site-specific SWPPP. Failure to implement the SWPPP is a violation of permit requirements.
- 2. Install structural practices as described in ACT5, T-6 in accordance with the site-specific SWPPP.
- 3. Retain a copy of the SWPPP at the permitted site, and, if feasible, post a copy of the NOI onsite in a location available to the public (e.g., construction entrance, trailer, or model home). A copy of the SWPPP shall be made available to state or local inspectors upon request for review at the time of an on-site inspection. In cases where there is no office or shelter to maintain documents onsite, the SWPPP can be kept locally available (i.e., able to be produced within an hour of being requested by a state or local inspector).

This SWPPP will be upheld by Relativity and the construction team. The controls and practices stated in the Erosion Control Plan, provided in Appendix B, will be followed. A copy of this SWPPP will be available at the site, as feasible. However, if not feasible, a copy will readily be supplied to inspectors onsite.

11.1 Pre-Construction Activities

MDEQ Baseline General Permit ACT6 S-1 (cont.):

- 4. Implement the following pre-construction activities:
 - a. Mark off areas of "disturbance", "no disturbance" and "sensitive areas" (i.e., delineate and clearly flag of mark off areas such as steep slopes, highly erodible soils or other sensitive areas),
 - b. Preserve native topsoil on the site to the extent feasible, and
 - c. Limit construction stream crossings to the minimum necessary to provide access for the construction project.
- 5. Ensure that appropriate BMPs are in place upon commencement of construction activities

Wetlands are the only sensitive areas identified in the development of the Construction Plan for the site. Relativity has completed the 404 permitting process for the 0.26 acres of disturbed wetlands previously reported.

Relativity is currently waiting for 404 documentation for the proposed 1.66 acres of disturbed wetlands within the COPV test stand construction area. Silt fences, controlled entrance and exit,

and check dams will be in place prior to construction; as required by the Erosion Control Plan, MSR10, and this SWPPP.

11.2 Storm Water Pollution Prevention Plan Amendment

MDEQ Baseline General Permit ACT6 S-1 (cont.) and S-2:

- 6. Amend the SWPPP if notified at any time by the Executive Director of the MDEQ that the SWPPP does not meet the minimum requirements. Coverage recipient shall certify in writing to the Executive Director that the requested changes have been made. Unless otherwise provided, the requested changes shall be made within fifteen (15) days.
- 7. Amend the SWPPP whenever there is a change in design, construction, operation, or maintenance which may potentially affect the discharge of pollutants to waters of the State; or the SWPPP proves to be ineffective in controlling storm water pollutants. The amended SWPPP shall be submitted within thirty (30) days of amendment. Coverage recipients shall submit to MDEQ the Major Modification Form (see Large Construction Forms Package) for subsequent phases, expansions and modifications of subdivision development that are proposed but were not included in the original SWPPP

Table 11-1 lists the three scenarios in which this Plan will be amended, including the timetable

Table 11-1 SWPPP Amendment Scenarios					
Cause of AmendmentAmendment toCause of AmendmentRequirementsSWPPP Timetable					
 MDEQ finds this Plan deficient the minimal requirements set h MSR10 	of by A letter will be submitted to MDEQ acknowledging the correction and changes made to the Plan in regard the deficient areas.	Within 15 days, unless otherwise specified by MDEQ			
 Plan shall be amended in the e that there is a change in design construction, operation, or maintenance which may affect discharge of pollutants offsite. 	event n, the updated SWPPP is to be submitted to MDEQ	Within 30 days			
3. SWPPP proves to be ineffective controlling storm water polluta	e in The updated SWPPP is to be submitted ints to MDEQ	Within 30 days			

for corrections and the required notifications to MDEQ, as applicable.

Notes:

SWPPP = Storm Water Pollution Prevention Plan

MDEQ = Mississippi Department of Environmental Quality

As such, the March 2025 SWPPP update herein includes revisions to incorporate the additional areas of land disturbance associated with construction of the COPV test stand. This supplemental construction activity adds an additional 1.93 acres of disturbance (with 1.66 acres of that being forested pine savannah wetlands). Construction of the COPV test stand is scheduled to start in April 2025. This increases the total project disturbance acreage from 25.08 acres to 27.01 acres.

Relativity has submitted to MDEQ the Major Modification Form, included in Appendix A, for associated expansions, and modifications of development that were not originally proposed as a part of the August 2023 SWPPP.

11.3 Erosion and Sediment Controls

MDEQ Baseline General Permit ACT6 S-2 (cont.) and S-3:

- 8. Install needed erosion controls even if they may be located in the way of subsequent activities, such as utility installation, grading or construction. It shall not be an acceptable defense that controls were not installed because subsequent activities would require their replacement or cause their destruction.
- 9. Install additional and/or alternative erosion and sediment controls when existing controls prove to be ineffective in preventing sediment from leaving the site.
- 10. Comply with applicable State or local waste disposal, sanitary sewer or septic system regulations.
- 11. Erosion and sediment controls shall be maintained at all times. Except for sediment basins, all accumulated sediment shall be removed from structural controls when sediment deposits reach one-third to one-half the height of the control. For sediment basins, accumulated sediment shall be removed when the capacity has been reduced by 50%. All removed sediment deposits shall be properly disposed of in accordance with the approved SWPPP. Non-functioning controls shall be repaired, replaced or supplemented with functional controls within twenty-four (24) hours of discovery or as soon as field conditions allow.
- 12. If, after coverage issuance, a specific wasteload allocation is established that would apply to the facility's discharge, the facility must implement steps necessary to meet that allocation.

Relativity shall install additional or alternative controls as necessary to prevent sediment from leaving the site. For example, if erosion controls are in the way of utility development, or other site development activities, it is NOT ACCEPTABLE to forgo erosion controls; alternative controls may be evaluated with the ultimate goal of preventing sediment from leaving the site.

Relativity will maintain sediment and erosion controls throughout the construction process, the controls onsite will be maintained in accordance with Table 8-2. Sediment collected will be disposed of at an approved disposal site.

12.0 RESPONSIBLE OFFICIAL REQUIREMENTS

MDEQ Baseline General Permit ACT11 T-7: *Signatory Requirements:* All LCNOIs and requests for recoverage shall be signed as follows:

- (1) For a corporation by a responsible corporate officer. For this permit, a responsible corporate officer means:
 - (A) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (B) The manager of one or more manufacturing, production or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

Note: MDEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in paragraph (1)(A) above. The Department will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Permit Board to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under paragraph (1)(B) above rather than to specific individuals.

- (2) For a partnership or sole proprietorship by a general partner or the proprietor, respectively; or
- (3) For a municipal, State, Federal, or other public agency by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (A) The chief executive officer of the agency, or
 - (B) (B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

MSR10 sets the minimal requirements of the person responsible for the overall implementation of the SWPPP. The Responsible Official/Duty Authorized Representative Identification Form (Appendix A) must be filled out and submitted to MDEQ to ensure that Relativity constantly has a Responsible Official identified for signature of documents required under the MSR10.

12.1 Duly Authorized Representative

MDEQ Baseline General Permit ACT11 T-8: *Duly Authorized Representative:* All SWPPPs, reports required by this permit, certifications and other information requested by the Permit Board shall be signed by a person described in T-7 above, or by a duly authorized representative of that person. A person is a duly authorized representative when:

- (1) The authorization is made in writing and submitted to the Permit Board by a person described in T-7 above.
- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated activity, such as: manager, operator of a well or well field, superintendent, person of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a specified individual or position).

The Responsible Official has the option to appoint a Duly Authorized Representative as an alternate signing inspection reports, forms, and any other information requested by MDEQ.

If the Responsible Official at Relativity should decide to appoint a Duly Authorized Representative, the Responsible Official/Duly Authorized Representative Identification Form (Appendix A) must be filled out and submitted to MDEQ.

13.0 Staff Training Requirements

MDEQ Large Construction General Permit ACT5 T-20

Each operator, or group of multiple operators, must assemble a "stormwater team" to carry out compliance activities associated with the requirements in this permit

Prior to the commencement of construction activities, the permittee must ensure that the following personnel on the stormwater team understand the requirements of this permit and their specific responsibilities with respect to those requirements:

(1) Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention controls);

(2) Personnel responsible for the application and storage of treatment chemicals (if applicable)

(3) Personnel who are responsible for conducting inspections as required in ACT6, S-5; and

(4) Personnel who are responsible for taking corrective actions as required in ACT6, S-2.

The permittee is responsible for ensuring that all activities on the site comply with the requirements of this permit. The permittee is not required to provide or document formal training for subcontractors or other outside service providers, but the permittee must ensure that such personnel understand any requirements of this permit that may be affected by the work they are subcontracted to perform.

At a minimum, members of the stormwater team must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

The permit deadlines associated with installation, maintenance, and removal of stormwater controls and with stabilization;

The location of all stormwater controls on the site required by this permit and how they are to be maintained; The proper procedures to follow with respect to the permit's pollution prevention requirements;

and When and how to conduct inspections, record applicable findings, and take corrective actions.

Each member of the stormwater team must have easy access to an electronic or paper copy of applicable portions of this permit, the most updated copy of the SWPPP, and other relevant documents or information that must be kept with the SWPPP.

Facility staff that have been designated as part of the Pollution Prevention Team (or Team), are listed below in the Table below along with their responsibilities and duties. This table will be updated as needed when there are changes to staff and staff responsibilities. The Team will be trained to perform the duties assigned to them.

Table 13-1 Pollution Prevention Team					
Name	Position	Contact	Responsibilities and Duties		
Amanda Makar	EHS Manager, Test Operations	914-907-6530	• Recommend resource allocation, as necessary, to ensure compliance with applicable requirements of this SWPPP, and specific government agency requests.		
David Sheline	 EHS Specialist 228-332-6693 Responsible for conducting and documenting inspections. Provide training to contractors. Recommend BMPs consistent with the Facility operations. Maintain records. 		 Responsible for conducting and documenting weekly inspections. Provide training to contractors. Recommend BMPs consistent with the Facility operations. Maintain records. 		
Stephen Abille	Sr Manager, Environmental Engineering	562-899-8867	 Implement the SWPPP through contracts and/or in- house resources to perform site inspections, ensure complete documentation, and facilitate corrective actions. 		
Jace Owens	Sr Manager, Infrastructure	504-258-1176	 Responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention controls). Responsible for addressing corrective actions as required. 		

Appendix A Permit Forms

AI	:	7521	4	
----	---	------	---	--

O.C

Rec'd via email: 03/07/2025

MAJOR MODIFICATION FORM

FOR LARGE CONSTRUCTION GENERAL PERMIT

Coverage No. MSR10 _____

County _____

INSTRUCTIONS

Coverage recipients shall notify the Mississippi Department of Environmental Quality (MDEQ) at least 30 days in advance of the following activities (check all that apply). This form should be submitted with a modified Storm Water Pollution Prevention Plan (SWPPP), updated USGS topographic map, Corps of Engineers Section 404 documentation and wastewater collection and treatment information, as appropriate.

SWPPP details have been developed and are being submitted for MDEQ review for subsequent phases of an existing project.

"Footprint" identified in the original LCNOI is proposed to be changed.

This form must be signed by the current coverage recipient under Mississippi's Large Construction General Permit. A different developer of new phases of existing subdivisions must apply for separate permit coverage through the submittal of a new complete LCNOI package. Coverage recipients are authorized to discharge storm water associated with proposed expansions of existing subdivisions or subsequent phases, under the conditions of the General Permit, <u>only upon receipt of written notification of approval by MDEQ</u>. All other modifications, such as changes of erosion and sediment controls used, must be in accordance with ACT6, S-1 (6) and S-2 (7) of the General Permit.

ALL INFORMATION MUST BE COMPLETED (indicate "N/A" where not applicable)

CURRENT COVERAGE RECIPIENT INFORMATION

COMPANY NAME:	
STREET OR P.O. BOX:	
CITY: STATE: ZIP:E-MAIL:	
IS THE APPLICANT DIFFERENT FROM THE CURRENT COVERAGE HOLDER? YES NO	

PREPARER/CONSULTANT INFORMATION (Complete if prepared by someone other than applicant.)

PREPARER/CONSULTANT CONTACT NAME: PHONE #					
COMPANY NAME:					
STREET OR P.O. BOX:					
CITY:	STATE:	ZIP:	E-MAIL:		
MAY MDEQ CORRESPOND DIRECTLY WITH THE PREPARER / CONSULTANT REGARDING THE PROPOSED PROJECT / MODIFICATION?					NO

SITE INFORMATION

PROJECT NAME:					
CITY: TF	RIBAL LAND ID (N/A If not applicable):				
Latitude / Longitude Collected at Project Entrance or Construction Start Point:					
LATITUDE: degrees minutes seconds	LONGITUDE: degrees minutes seconds				
LAT & LONG COLLECTION METHOD (e.g., GPS, Map Interpolation):					
REDUCTION IN ACREAGE:	ADDITIONAL ACREAGE TO BE DISTURBED:				
TOTAL PROJECT ACREAGE:	ESTIMATED CONSTRUCTION END DATE:				

IS THE PROJECT REROUTING, FILLING OR CROSSING A WATER CONVEYANCE \Box YES □ NO OF ANY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements.)

IF THE PROJECT IS A SUBDIVISION OR A COMMERCIAL DEVELOPMENT, HOW WILL SANITARY SEWAGE BE DISPOSED? Check one of the following and attach the pertinent documents.

- Existing Municipal or Commercial System. Please attach plans and specifications for the collection system and the associated "Information Regarding Proposed Wastewater Projects" form or approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specifications cannot be provided at the time of LCNOI submittal, MDEQ will accept written acknowledgement from official(s) responsible for wastewater collection and treatment that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow.
- Collection and Treatment System will be Constructed. Please attach a copy of the cover of the NPDES discharge permit from MDEQ or indicate the date the application was submitted to MDEQ (Date:
- 🗆 Individual Onsite Wastewater Disposal Systems for Subdivisions Less than 35 Lots. Please attach a copy of the Letter of General Acceptance from the Mississippi State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.
- 🗆 Individual Onsite Wastewater Disposal Systems for Subdivisions Greater than 35 Lots. A determination of the feasibility of installing a central sewage collection and treatment system must be made by MDEQ. A copy of the response from MDEQ concerning the feasibility study must be attached. If a central collection and wastewater system is not feasible, then please attach a copy of the Letter of General Acceptance from the State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.

INDICATE ANY LOCAL STORM WATER ORDINANCE WITH WHICH THE PROJECT MUST COMPLY:

NEAREST NAMED RECEIVING STREAM:		
IS RECEIVING STREAM ON MISSISSIPPI'S 303(d) LIST OF IMPAIRED WATER BODIES? (The 303(d) list of impaired waters and TMDL stream segments may be found on MDEQ's web site: <u>https://www.mdeq.ms.gov/water/surface-water/tmdl/</u>	□ YES	□ NO
HAS A TMDL BEEN ESTABLISHED FOR THE RECEIVING STREAM SEGMENT?	□ YES	

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 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.

Signature (must be signed by coverage recipient)

Printed Name

Date

Title

Please submit this form to: Chief, Environmental Permits Division Office of Pollution Control MS Department of Environmental Quality P.O. Box 2261 Jackson, Mississippi 39225 https://www.mdeg.ms.gov/construction-stormwater/

Electronically:

Page 2 of 2 Revised: 8/16/2022

MSR10 <u>8 6 5 3</u>

(NUMBER TO BE ASSIGNED BY STATE)

APPLICANT IS THE:	PRIME CONT	RACTOR		
OWNER CO	NTACT INFORM	IATION		
OWNER CONTACT PERSON: Amanda Mak	ar			
OWNER COMPANY LEGAL NAME: Relativity Sp	bace, Inc.			
OWNER STREET OR P.O. BOX: Building 4080				
OWNER CITY: Stennis Space Center	STATE: MS		ZIP: ³⁹⁵²	9
OWNER PHONE #: (914) 907-6530	OWNER EMAIL: _	amakar@relativity	space.com	
PRIME CONTRACT	FOR CONTACT I	NFORMATION		
PRIME CONTRACTOR CONTACT PERSON: Jac	e Owens			
PRIME CONTRACTOR COMPANY LEGAL NAM	E: Relativity Space, In	IC.		
PRIME CONTRACTOR STREET OR P.O. BOX: ^B	Building 4080			
PRIME CONTRACTOR CITY: Stennis Space Ce	enter STATE	: MS	ZIP: ³⁹⁵	29
PRIME CONTRACTOR PHONE #: $(\frac{504}{2})^{2581176}$	⁵ PRIME CONTRA	CTOR EMAIL: ^{jowen}	s@relativitysp	ace.com
ЕЛСИ ІТУ	SITE INFODMA	TION		
	SITE INFORMA			
		11		. ,
indicate the beginning of the project and identify all cour	ties the project traverse	es.)	l road. For linea	r projects
STREET: Propellant Road & Saturn Drive				
CITY: <u>Stennis Space Center</u> STATE: <u>MS</u>	COUN	NTY: Hancock	ZIP: <u>39</u>	9529
FACILITY SITE TRIBAL LAND ID (N/A If not app	licable): NA	00 05	07.4	
LATITUDE: <u>30</u> degrees <u>22</u> minutes <u>18.6</u> seconds	s LONGITUDE: <u></u>	$\frac{89}{2}$ degrees $\frac{35}{2}$ minut	tes $\frac{37.1}{2}$ seconds	
LAT & LONG DATA SOURCE (GPS (Please GPS Project	<i>t Entrance/Start Point)</i> or M	ap Interpolation): Map In	terpolation	_
TOTAL ACREAGE THAT WILL BE DISTURBED	22.88			
IS THIS PART OF A LARGER COMMON PLAN O	F DEVELOPMENT?		$YES \square$	NO 🛛
IF YES, NAME OF LARGER COMMON PLAN OF AND PERMIT COVERAGE NUMBER: MSR	DEVELOPMENT: N 10	A		
ESTIMATED CONSTRUCTION PROJECT START	T DATE:		2022-03-18	
			2026-01-31	
ESTIMATED CONSTRUCTION PROJECT END D	AIE:		YYYY-MM-DD	
DESCRIPTION OF CONSTRUCTION ACTIVITY:	Construction of two engine to	est stands, deluge tank, bulk ga	as storage, and ancill	ary buildings
PROPOSED DESCRIPTION OF PROPERTY USE A Space flight hardware and launch vehicle design, assembly, processing, and testing	AFTER CONSTRUCT	TION HAS BEEN CON	IPLETED: delivery of cargo and pay	loads to space
SIC Code <u>3</u> 7 <u>6</u> <u>1</u> NAICS Code <u>3</u> <u>3</u> <u>6</u>	4 1 4			

NEAREST NAMED RECEIVING STREAM: East Pearl Rive	r		
IS RECEIVING STREAM ON MISSISSIPPI'S 303(d) LIST (BODIES? (The 303(d) list of impaired waters and TMDL stre http://www.deq.state.ms.us/MDEQ.nsf/page/TWB_Total_Maximu	DF IMPAIRED WATER am segments may be found on MDE um_Daily_Load_Section)	YES□ Q's web site:	NO
HAS A TMDL BEEN ESTABLISHED FOR THE RECEIVIN	G STREAM SEGMENT?	YES	NO
ARE THERE RECREATIONAL STREAMS, PRIVATE/PUB WITHIN ½ MILE DOWNSTREAM OF PROJECT BOUND ACTIVITY?	BLIC PONDS OR LAKES RY THAT MAY BE IMPACTED B	YES□ Y THE CONSTR	NO ☑ RUCTION
EXISTING DATA DESCRIBING THE SOIL (for linear proju- located within the coastal deposits of the MS Gulf coast. Characterized by a cross-bedded mixture of silt, sand, gravel, and clay. Deposits may also	ects please describe in SWPPP): contain limestone at depth. Sediments of the coastal deposits lack regional lithologic	layering and tend to be discontinuous w	ith variable thickness.
WILL FLOCCULANTS BE USED TO TREAT TURBIDITY	IN STORM WATER?	YES□	NO
IF YES, INDICATE THE TYPE OF FLOCCULANT.	□ ANIONIC POLYACRYLIM □ OTHER	IDE (PAM)	
IF YES, DOES THE SWPPP DESCRIBE THE METHOD OF AND THE LOCATION OF WHERE FLOCCULATED MAT	FINTRODUCTION, THE LOCATI ERIAL WILL SETTLE?	ON OF INTROE YES 🗆	DUCTION

¹Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft² per lot (entire lot, if smaller) shall be included in calculating acreage disturbed.

DOCUMENTATION OF COMPLIANCE WITH OTHER REGULATIONS/REQUIREMENTS COVERAGE UNDER THIS PERMIT WILL NOT BE GRANTED UNTIL ALL OTHER REQUIRED MDEQ PERMITS AND APPROVALS ARE SATISFACTORILY ADDRESSED

IS LC	NOI FOR A FACILITY THAT WILL REQUIRE OTHER PERMITS?	_	_
		YES 🗹	NO 🗆
IF YI	CS, CHECK ALL THAT APPLY: 🗹 AIR 🛛 HAZARDOUS WASTE	PRETREA	TMENT
	\Box water state operating \Box individual npdes	\Box OTHER: $\underline{\underline{s}}$	Section 404
IS TH OF A	IE PROJECT REROUTING, FILLING OR CROSSING A WATER CONVEYANC NY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch fo	E YES or permitting req	NO 🔽 uirements.)
IF TH DOC	IE PROJECT REQUIRES A CORPS OF ENGINEER SECTION 404 PERMIT, PROUMENTATION THAT:	OVIDE APPROI	PRIATE
•	The project has been approved by individual permit, or		
•	The work will be covered by a nationwide permit and NO NOTIFICATION to the C	Corps is required	, or
•	The work will be covered by a nationwide or general permit and NOTIFICATION t	to the Corps is re	quired
IS A I (If yes	LAKE REQUIRING THE CONSTRUCTION OF A DAM BEING PROPOSED? s, provide appropriate approval documentation from MDEQ Office of Land and Wa	YES □ ter, Dam Safety.)] NO ☑
IF TH BE D	IE PROJECT IS A SUBDIVISION OR A COMMERCIAL DEVELOPMENT, HOW ISPOSED? Check one of the following and attach the pertinent documents.	WILL SANITA	ARY SEWAGE
	Existing Municipal or Commercial System. Please attach plans and specifications for associated "Information Regarding Proposed Wastewater Projects" form or approve Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specification of LCNOI submittal, MDEQ will accept written acknowledgement from official(s) re collection and treatment that the flows generated from the proposed project can and properly. The letter must include the estimated flow.	or the collection s val from County U ons can not be pr esponsible for wa d will be transpor	system and the Itility Authority in ovided at the time astewater rted and treated
	Collection and Treatment System will be Constructed. Please attach a copy of the copermit from MDEQ or indicate the date the application was submitted to MDEQ (D	over of the NPDE Date:	S discharge)
	Individual Onsite Wastewater Disposal Systems for Subdivisions Less than 35 Lots. of General Acceptance from the Mississippi State Department of Health or certificat engineer that the platted lots should support individual onsite wastewater disposal s	Please attach a c tion from a regis ystems.	opy of the Letter tered professional
	Individual Onsite Wastewater Disposal Systems for Subdivisions Greater than 35 La feasibility of installing a central sewage collection and treatment system must be ma response from MDEQ concerning the feasibility study must be attached. If a centra is not feasible, then please attach a copy of the Letter of General Acceptance from th certification from a registered professional engineer that the platted lots should supplicipations disposal systems.	ots. A determina de by MDEQ. A I collection and v ne State Departm port individual o	ition of the copy of the vastewater system lent of Health or nsite wastewater
INDI	CATE ANY LOCAL STORM WATER ORDINANCE WITH WHICH THE PROJE	CT MUST COM	IPLY:
NA			

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 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.

Arille

Signafure of Applicant¹ (owner or prime contractor)

Stephen Abille

Printed Name¹

03-03-2025

Date Signed

Sr Manager, Environmental Engineering

Title

¹This application shall be signed as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.

For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official

Please submit the LCNOI form to:

Chief, Environmental Permits Division MS Department of Environmental Quality, Office of Pollution Control P.O. Box 2261 Jackson, Mississippi 39225

PRIME CONTRACTOR CERTIFICATION

LARGE CONSTRUCTION GENERAL PERMIT

Coverage No. MSR10

County

(Fill in your Certificate of Coverage Number and County)

By completing and submitting this form to MDEQ, the prime contractor is certifying that (1) they have operational control over the erosion and sediment control specifications (including the ability to make modifications to such specifications) or (2) they have day-to-day operational control of those activities at the site necessary to ensure compliance with the SWPPP and applicable permit conditions.

The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the permit. Notwithstanding any permit condition to the contrary, the coverage recipient and any person who causes pollution of waters of the state or places waste in a location where they are likely to cause pollution of any waters of the state shall remain responsible under applicable federal and state laws and regulations and applicable permits.

PRIME CONTRACTOR INFORMATION

PRIME CONTRACTOR CONTACT PERSON:	PHONE NUMBER: ()
PRIME CONTRACTOR COMPANY:	
PRIME CONTRACTOR STREET (P.O. BOX):	
PRIME CONTRACTOR CITY:	STATE: ZIP:
E-MAIL ADDRESS:	
OWNER INF	ORMATION
OWNER CONTACT PERSON:	PHONE NUMBER: ()
OWNER COMPANY NAME:	
PROJECT INI	FORMATION
PROJECT NAME:	
DESCRIPTION OF CONSTRUCTION ACTIVITY:	
PHYSICAL SITE ADDRESS (If the physical address is not avai indicate the beginning of the project and identify all counties the	lable indicate the nearest named road. For linear projects, e project traverses.)
STREET:	
CITY:COUNT	Y:
I certify that I am the prime contractor for this project and will comply permit. I further certify under penalty of law that this document and a accordance with a system designed to assure that qualified personnel p my inquiry of the person or persons who manage the system, or those p information submitted is, to the best of my knowledge and belief, true, penalties for submitting false information, including the possibility of fi	with all the requirements in the above referenced general NPDES all attachments were prepared under my direction or supervision in roperly gathered and evaluated the information submitted. Based on persons directly responsible for gathering the information, the accurate and complete. I am aware that there are significant ine and imprisonment for knowing violations.
Prime Contractor Signature ¹	Date Signed

Printed Name¹

¹This application shall be signed as follows:

- For a corporation, by a responsible corporate officer.

- For a partnership, by a general partner. For a sole proprietorship, by the proprietor. For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official.

Title

This Prime Contractors Certification form shall be submitted to:

Chief, Environmental Permits Division MS Department of Environmental Quality, Office of Pollution Control P.O. Box 2261 Jackson, Mississippi 39225



R	esponsible Official/Duly Authorized Representative Identification Form (The following page is to be used for specifying facility contacts)
Facility Name:	Relativity Space, Inc. Facility Number:
I hereby certify	that I am qualified under the regulatory definition to be the responsible official for the above-named
facility. Specifi	ically, I,Stephen Abille: (Typed or printed name)
()	am an officer of the corporation. My title is
∞	perform policy or decision-making functions similar to that of an officer of the corporation.
	Explain: Corporate subject matter expert responsible for environmental
	permitting and compliance across Relativity's manufacturing, launch, and test sites.
()	am a general partner in a partnership.
()	am the owner of a sole proprietorship.
()	am a principal executive officer or ranking elected official of a municipality, state, federal, or other
	public agency. My office/title is:
	My agency is:
Note: A duly author duly authorized rep	rized representative may only be designated for corporations, and while a corporation may have several responsible officials, it can only have or resentative.
I hereby designation	ate as a duly authorized representative to act in my stead.
This individual'	's business title is:
I also certify that under these regu	at this individual is responsible for the overall operation of one or more facilities applying for or subject to a permit ulations and that
()	the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
	approval of this delegation of authority has been previously requested of and given by the DEQ.
Offin d	
Signature of res	sponsible official Signature of duly authorized representative designee
02/10/22 Date	
For MDEQ use	only:

Acknowledged by

Date

Appendix B Figures









SITE CONSTRUCTION NOTES:

- 1 CONSTRUCT ROAD BASE SECTION PER DETAIL 1, SHEET C-4.1.
- 2 CONSTRUCT CONCRETE PAVEMENT SECTION PER DETAIL 2, SHEET C-4.1. CONSTRUCT CUSTOM CONCRETE HS20
 ROAD CROSSING TRENCH WITH STEEL LID PER DETAIL 3, SHEET C-4.1.
- CONSTRUCT PRECAST 36" X 36" HS20 RATED ROAD CROSSING TRENCH WITH STEEL LID.
- CONSTRUCT 12-INCH REINFORCED 5 CONCRETE PIPE CULVERT PER DETAIL 10,
- SHEET C-4.1. 6 CONSTRUCT 24-INCH REINFORCED 6 CONCRETE BOX CULVERT PER DETAIL 10,
- SHEET C-4.1.
- CONSTRUCT 12-INCH REINFORCED CONCRETE PIPE CULVERT PER DETAIL 10, SHEET C-4.1.



60

30

0



TERRAN R TEST FACILITY - STAGE 2 TEST STAND

STENNIS SPACE CENTER, MISSISSIPPI

S	STANDARD ABBREVIA					
A	VC	ASPHALTIC CO				
В	LDG	BUILDING				
В	CR	BEGIN CURB RE				
В	VC	BEGIN VERTICA				
В	W	BOTTOM OF WA				
C	В	CATCH BASIN				
С	:/L	CENTERLINE				
C	MU	CONCRETE MA				
С	ONC	CONCRETE				
D	W	DRIVEWAY				
E	CR	END CURB RET				
E	G	EXISTING GRAD				
Е	P	EDGE OF PAVE				
E	VC	END VERTICAL				
F	F	FINISHED FLOO				
F	G	FINISHED GRAD				
F	Ή	FIRE HYDRANT				
F	L	FLOW LINE				
F	S	FINISHED SURF				
G	βB	GRADE BREAK				

Scope included in the August 2023 submittal

SURVEY NOTES

EXISTING TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON PER SURVEY BY LAND & SEA SURVEYING CONCEPTS, INC. DATED 2021/11/11.

HORIZONTAL AND VERTICAL CONTROL BASED UPON NAD83 STATE PLANE COORDINATES, MISSISSIPPI, EAST ZONE 2301, AND NAVD88 UTILIZING NGS STATION M 366.

SURVEY MONUMENT PROTECTION:

PROTECT AND PRESERVE, IN PLACE, ALL SURVEY MONUMENTS AND BENCHMARKS DO NOT DISTURB, MOVE, OR RELOCATE MONUMENTS OR BENCHMARKS WITHOUT THE PRIOR REVIEW AND APPROVAL BY THE AGENCY HAVING JURISDICTION OVER THE MONUMENT OR BENCHMARK. THE CONTRACTOR SHALL CONTRACT WITH A LICENSED SURVEYOR FOR MONUMENTS REQUIRING DISTURBANCE OR REMOVAL AND THE SURVEYOR SHALL RESET THE MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE AUTHORITY HAVING JURISDICTION, PURSUANT TO ALL APPLICABLE BUSINESS AND PROFESSIONAL CODES.

S	Η	E	E	Т	IN	۱D	E)	X	

SHEET	SHEET TITLE
C-0.1	TITLE SHEET
C-0.2	NOTES SHEET
C-2.0	SITE IMPROVEMENT INDEX
C-2.1	SITE IMPROVEMENT PLAN
C-2.2	SITE IMPROVEMENT PLAN
C-2.3	SITE IMPROVEMENT PLAN
C-4.1	DETAIL SHEET
C-5.1	EROSION CONTROL PLAN
C-5.2	EROSION CONTROL DETAILS
C-5.3	QD LINE PLAN

^	т	NI	c

VIATIONS			PROJECT INFORM	EXISTING UTILITY L	
CONCRETE	IE	INVERT ELEVATION	CLIENT:		PRIOR TO COMMENCING
	INV	INVERT		STENNIS SPACE CENTER, MISSISSIPPI	CONTACT PROJECT MAN OR (504) 258-1176 TO CO
B RETURN	LA	LANDSCAPE AREA	GEOTECHNICAL:	TERRACON CONSULTANTS, INC. 859 PEAR ORCHARD BIDGELAND, MS 39157	
TICAL CURVE	NG	NATURAL GRADE		RIDGLEAND, NO 39137	
F WALL	PA	PLANTER AREA		INTERTEK PSI 724 CENTRAL AVENUE JEEEERSON JA 70121	
SIN	PCC	PORTLAND CEMENT CONCRETE		JEITERSON, ER 70121	
	P/L	PROPERTY LINE	SURVEYOR:	LAND & SEA SURVEYING CONCEPTS, INC. 1605 CHASE HAMMOCK ROAD	
	POC	POINT OF CONNECTION		MERRITTISLAND, FL 32953	
	PS	PARKING STRIPE	GRADING INFORMAT	ION*	
	PVC	POLYVINYL CHLORIDE	AREA DISTURBED:	22.38 AC	
REIURN	RW	RIGHT OF WAY	CUT QUANTITY:	200 CUBIC YARDS	
	SD	STORM DRAIN	FILL QUANTITY: NET QUANTITY:	2,500 CUBIC YARDS 2,300 CUBIC YARDS IMPORT	
AVEMENI	SG	SUB-GRADE ELEVATION	*NOTE: THE ABOVE	QUANTITIES ARE FOR PLANNING AND PERMITTING PURPOSES	
CAL CURVE	SS	SANITARY SEWER	ONLY. SHRINKAGE; (CLEARING AND DEM	CONSOLIDATION AND SUBSIDENCE FACTORS; LOSSES DUE TO OLITION OPERATIONS; AND TRENCHING FOR UTILITIES AND	
LOOR	TC	TOP OF CURB, CONCRETE	FOUNDATIONS ARE N BASED ON THE APPF	NOT INCLUDED. ESTIMATED EARTHWORK QUANTITIES ARE ROXIMATE DIFFERENCE BETWEEN EXISTING GRADES AND	
GRADE	TF	TOP OF FOOTING	PROPOSED FINISHE	D GRADES OR PAVEMENT SUBGRADES, AS INDICATED ON THE O VARY ACCORDING TO THESE FACTORS AND LOSSES. THE	
ANT	TG	TOP OF GRATE	CONTRACTOR SHALL	L PERFORM AN EARTHWORK ESTIMATE FOR THE PURPOSE OF SUM BID PRICE FOR EARTHWORK. THE BID PRICE SHALL	
	TW	TOP OF WALL	MATERIALS OR THE I	EXPORT AND PROPER DISPOSAL OF EXCESS EARTH MATERIALS.	
EAK	VC	VERTICAL CURVE			

OCATION

OF ANY EXCAVATION, DIGGING, POT HOLING, ETC. NAGER JACE OWENS AT JOWENS@RELATIVITYSPACE.COM OORDINATE MARKING OF EXISTING UTILITIES.

ese plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: REV. DATE DESCRIPTION STAME:	
ohibited. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual contact with th	Asheyavance Engineering, inc	1413 Monterey Street San Luis Obispo, CA 93401 (805) 545-0010 CIVIL • STRUCTURAL www.ashleyvance.com
y were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in part, is pro	TERRAN R TEST FACILITY STAGE 2 TEST STAND	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
he use of these plans and specifications shall be restricted to the original site for which they w	SHEET TITLE: TITLE S PRINT DATE: DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NO: CHC-(08/11/2023 BRJ BRJ PER PLAN 211524

GENERAL NOTES:

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH UFC 1-200-01.
- 2. IN THE EVENT OF A CONFLICT BETWEEN ANY REFERENCED STANDARD, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- 3. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 4. BEFORE BEGINNING WORK, CONTRACTOR SHALL CONFIRM WITH AGENCIES HAVING JURISDICTION THAT ALL REQUIRED PERMITS AND LICENSES HAVE BEEN OBTAINED AND ALL REQUIRED NOTICES
- 5. UNDERGROUND AND OVERHEAD CONSTRUCTION IN ADDITION TO WHAT IS SHOWN ON THESE PLANS MAY BE PART OF THIS PROJECT, INCLUDING ARCHITECTURAL AND LANDSCAPE ARCHITECTURAL IMPROVEMENTS. ADDITIONAL PERMITS MAY BE REQUIRED.
- A. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK AND INTERFACING IMPROVEMENTS WITH WORK BY OTHER CONTRACTORS AT THIS JOB SITE AND WITH IMPROVEMENTS REQUIRED BY PLANS BY OTHERS.
- B. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR BUILDING AND SITE LAYOUT DIMENSIONING.
- C. CONTRACTOR SHALL REFER TO ARCHITECTURAL AND LANDSCAPE ARCHITECTURAL PLANS AND SPECIFICATIONS FOR SITE DEVELOPMENT CONSTRUCTION DETAILS AND DIMENSIONING. INCLUDING THOSE FOR BUILDINGS, PATIOS, WALKWAYS, DRIVEWAYS, WALLS/FENCES, PLUMBING, ELECTRICAL, UTILITIES, LANDSCAPING, AND IRRIGATION.
- 7. ALL SITE WORK AND TESTING SHALL BE DONE IN CONFORMANCE WITH THE RECOMMENDATIONS CONTAINED IN THE FOLLOWING GEOTECHNICAL ENGINEERING REPORT FOR THIS PROJECT:
- A. PREPARED BY: TERRACON CONSULTANTS, INC REPORT NUMBER: E4215031 DATE: 11/27/2021
- B. THIS REPORT AND ANY ADDENDA SHALL BE INCORPORATED INTO THESE PLANS AND MADE A PART HEREOF AS IF SPELLED OUT IN THEIR ENTIRETY HEREON. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE APPLICABLE GEOTECHNICAL REPORTS. CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER TO OBTAIN OR REVIEW COPIES OF THESE REPORTS AND ADDENDA.
- C. PRIOR TO BIDDING, CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER TO DETERMINE THE LOCATION AND DEPTH OF ALL TEST BORINGS AND EXPLORATORY PITS AND EXCAVATIONS. CONTRACTOR SHALL DETERMINE FROM THE GEOTECHNICAL ENGINEER WHAT REMEDIAL WORK IS RECOMMENDED TO MAKE THESE DISTURBED LOCATIONS SUITABLE FOR THE PROPOSED IMPROVEMENTS CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS FOR THE RECOMMENDED. REMEDIAL WORK AND SHALL ADJUST HIS OPERATIONS TO PROPERLY SEQUENCE THE WORK TO ACCOMMODATE REMEDIAL WORK WITH CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- 8. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE HEALTH AND SAFETY LAWS, ORDINANCES, REGULATIONS, RULES, AND STANDARDS INCLUDING ALL REQUIREMENTS OF OSHA
- 9. ALL UNSUITABLE CONSTRUCTION MATERIALS AND RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE; TRANSPORTED TO A SUITABLE LOCATION, AND DISPOSED OF IN A PROPER AND LEGAL MANNER
- 10. ALL WORK INVOLVING EXCAVATION, INCLUDING THAT FOR WATER, SEWER, STORM DRAIN AND UTILITY CONDUITS AND ALL SERVICE CONNECTIONS AND METER BOXES (NOT PERMITTED IN DRIVEWAYS) SHALL BE COMPLETED AND OBSERVED AND APPROVED BY THE AGENCY HAVING JURISDICTION AND THE STRUCTURAL BACKFILL OBSERVED AND TESTED FOR COMPACTION AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE AGGREGATE BASE, PAVING AND OTHER PERMANENT SURFACE CONSTRUCTION MAY COMMENCE.
- 11. BEFORE COMMENCING EXCAVATION, CONTRACTOR SHALL CONTACT PUBLIC WORKS AND UTILITY COMPANIES OR OTHER OWNERS OF SUBSURFACE FACILITIES WITHIN THE WORK SITE AND SHALL VERIFY WHETHER OR NOT A REPRESENTATIVE WILL BE PRESENT BEFORE AND/OR DURING EXCAVATION, AND SHALL DETERMINE SITE SPECIFIC REQUIREMENTS FOR EXCAVATION.
- 12. CONTRACTOR SHALL NOTIFY PUBLIC WORKS, BUILDING AND SAFETY, UTILITY COMPANIES GEOTECHNICAL ENGINEER, AND ENGINEER OF RECORD, AT LEAST 48 HOURS BEFORE START OF ANY CONSTRUCTION AND OF THE TIME AND LOCATION OF PRE-CONSTRUCTION CONFERENCE, AND SHALL DETERMINE FROM EACH PARTY THEIR SCOPE OF WORK TO BE OBSERVED AND BY WHOM, AND SCOPE OF TESTING. DURING THE COURSE OF WORK, CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR OBSERVATION AND TESTING AS STIPULATED PURSUANT TO ABOVE DETERMINATIONS. WORK NOT OBSERVED AND TESTED WILL BE SUBJECT TO REJECTION.
- 13. CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SUCH SHEETING, SHORING, BRACING, AND/OR OTHER PROTECTION AS IS NECESSARY TO PREVENT FAILURE OF TEMPORARY EXCAVATIONS AND EMBANKMENTS AND TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS. TEMPORARY IMPROVEMENTS AND PARTIALLY COMPLETED PORTIONS OF THE WORK CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SUFFICIENCY OF SUCH SUPPORTS AND/OR OTHER PROTECTION PER ALL REQUIREMENTS OF OSHA.
- 14. CONTRACTOR SHALL PROMPTLY NOTIFY ENGINEER OF RECORD AND AUTHORITY HAVING JURISDICTION BY TELEPHONE AND IN WRITING UPON DISCOVERY OF, AND BEFORE DISTURBING ANY PHYSICAL CONDITIONS DIFFERING FROM THOSE REPRESENTED BY APPROVED PLANS AND SPECIFICATIONS
- 5. CONTRACTOR SHALL MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL CHANGES OF CONSTRUCTION FROM THAT SHOWN ON THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING A BASIS FOR CONSTRUCTION OF RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER OF RECORD AND AUTHORITY HAVING JURISDICTION. UPON COMPLETION OF THE PROJECT. CONTRACTOR SHALL DELIVER THIS RECORD OF ALL CONSTRUCTION CHANGES TO ENGINEER ALONG WITH A LETTER WHICH DECLARES THAT, OTHER THAN THESE NOTED CHANGES, "THE PROJECT WAS CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS."
- WARNING: ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED IN WRITING BY PREPARER.
- 16. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND INDEMNIEY AND HOLD DESIGN PROFESSIONALS HARMLESS FROM ALL LIABILITY AND CLAIMS REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT AND ACCEPTS LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONALS.
- 17. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL AND SAFETY AND SHALL FURNISH, INSTALL, AND MAINTAIN SUCH FENCING, SIGNS, LIGHTS, TRENCH PLATES, BARRICADES, AND/OR OTHER PROTECTION AS IS NECESSARY FOR SAID CONTROL AND SAFFTY
- 18. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR PROTECTION OF PUBLIC AND PRIVATE PROPERTY AT OR IN THE VICINITY OF THE JOB SITE AND FURTHER AGREES TO, AT CONTRACTOR'S EXPENSE, REPAIR OR REPLACE TO ORIGINAL CONDITION, ALL EXISTING IMPROVEMENTS WITHIN OR IN THE VICINITY OF THE JOB SITE WHICH ARE NOT DESIGNATED FOR REMOVAL AND WHICH ARE DAMAGED OR REMOVED AS A RESULT OF CONTRACTOR'S OPERATIONS

GENERAL GRADING NOTES:

- 1. GRADING SHALL BE IN CONFORMANCE WITH RECOMMENDATIONS MADE BY THE GEOTECHNICAL ENGINEER DURING OBSERVATION AND TESTING OF SITE DEMOLITION, PREPARATION, GRADING, AND DEVELOPMENT WORK. FOR ANY CONFLICT BETWEEN THESE PLANS AND THE RECOMMENDATIONS AND/OR SPECIFICATIONS OF THE GEOTECHNICAL ENGINEER, THE MORE STRINGENT PROVISION SHALL GOVERN.
- AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION (EXCEPT TREES INDICATED TO REMAIN), INCLUDING ROOTS AND ROOT STRUCTURES, OTHER ORGANIC MATERIAL, DEBRIS. NON-COMPLYING FILL, AND OTHER MATERIAL UNSUITABLE FOR SUPPORT OF FILL AND/OR PROPOSED IMPROVEMENTS, AS RECOMMENDED BY AND UNDER THE OBSERVATION AND TESTING OF THE GEOTECHNICAL ENGINEER. CALL THE INSPECTOR FOR INITIAL INSPECTION.
- ALL UNSUITABLE SOIL MATERIALS AND RUBBISH AND DEBRIS RESULTING FROM DEMOLITION AND GRADING OPERATIONS SHALL BE REMOVED FROM THE JOB SITE; TRANSPORTED TO A SUITABLE LOCATION AND DISPOSED OF IN A PROPER AND LEGAL MANNER.
- 4. AREAS TO RECEIVE FILL MATERIAL AND AREAS TO RECEIVE BUILDINGS, EXTERIOR SLABS, WALKWAYS, WALLS, PAVEMENT AND OTHER STRUCTURAL IMPROVEMENTS SHALL BE PREPARED AS RECOMMENDED BY AND UNDER THE OBSERVATION AND TESTING OF THE GEOTECHNICAL ENGINEER. RECOMMENDATIONS FOR OVER EXCAVATION, ADDITIONAL SCARIFICATION, BACKFILL AND RECOMPACTION ARE CONTAINED IN THE PROJECT GEOTECHNICAL REPORT REFERENCED IN THE GENERAL NOTES ON THESE PLANS.
- PRIOR TO PLACEMENT OF FILL AND BACKFILL MATERIAL, THE PREPARED AREA SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR. THE GEOTECHNICAL ENGINEER SHALL ALSO OBSERVE THE AREAS TO BE FILLED. ALLOW A MINIMUM 48-HOUR NOTICE. FILL AND BACKFILL PLACED ON THE PREPARED AREA WITHOUT THE REQUIRED OBSERVATION SHALL BE REMOVED.
- ALL FILL MATERIAL, WHETHER EXCAVATED ON-SITE OR IMPORTED FROM OFF-SITE, SHALL BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. IMPORTED FILL MATERIAL SHALL BE EQUAL TO OR BETTER IN QUALITY THAN THE ON-SITE SOILS AND SHALL CONFORM TO THE RECOMMENDATION OF THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL TEST AND APPROVE THE SOIL PROPOSED FOR IMPORT FOR STRUCTURAL FILL PRIOR TO IMPORTATION TO THE SITE. THE LANDSCAPE ARCHITECT AND THE GEOTECHNICAL ENGINEER SHALL TEST AND APPROVE THE SOIL PROPOSED FOR IMPORT FOR LANDSCAPE AREA SURFACE MATERIAL PRIOR TO IMPORTATION TO THE SITE.
- CONTRACTOR SHALL REFER TO THE FOLLOWING AS APPLICABLE: - ARCHITECT'S PLANS FOR ADDITIONAL GRADING REQUIREMENTS IN BUILDING AREAS. - LANDSCAPE ARCHITECT'S PLANS FOR TREE PRESERVATION REQUIREMENTS AND FOR SUBGRADE ALLOWANCES IN LANDSCAPE AREAS. - PUBLIC IMPROVEMENT PLANS FOR INTERFACING WITH PUBLIC GRADING, PAVING, STORM DRAINAGE AND UTILITY IMPROVEMENTS.
- 8. WHERE PLANTER AREAS ARE SHOWN ON THE PLANS ADJACENT TO BUILDINGS AND ARE CONTAINED BY WALKS / FLATWORK LESS THAN 8" BELOW BOTTOM OF SILL PLATE OR WHERE ADJACENT FINISH GRADE OUTSIDE A BUILDING IS SHOWN TO BE LESS THAN 8" BELOW BOTTOM OF SILL PLATE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT BUILDING PLANS CALL FOR APPROPRIATE DAMPPROOF OR WATERPROOF CONSTRUCTION AND IS CONSTRUCTED IN ACCORDANCE WITH ALL BUILDING APPLICABLE CODE REQUIREMENTS
- PLAN ELEVATIONS SHOWN ON SOIL AND LANDSCAPED AREAS ARE FINISH GRADE (FINISH SURFACE) ELEVATIONS INTENDED TO ESTABLISH SURFACE DRAINAGE CONTROL FOR THESE AREAS. DURING GRADING OPERATIONS, THICKNESSES (SUBGRADE ALLOWANCES) SPECIFIED BY LANDSCAPE ARCHITECT FOR TURF, WOOD CHIPS, MULCH, ETC. SHALL BE SUBTRACTED FROM THESE ELEVATIONS TO ESTABLISH FINISH SUBGRADE.
- 10. BEFORE PLACEMENT OF AGGREGATE BASE OR SUBBASE MATERIAL IN PAVEMENT AREAS, THE SUBGRADE SOIL SHALL BE REVIEWED AND TESTED BY THE GEOTECHNICAL ENGINEER. DURING PAVING OPERATIONS, STRUCTURAL SECTION COMPACTION SHALL BE OBSERVED AND TESTED BY THE GEOTECHNICAL ENGINEER.
- 11. QUALITY REVIEW AND REPORTING REQUIREMENTS.
- A. GRADING AND IMPROVEMENTS FOUND NOT IN CONFORMANCE WITH APPROVED PLANS AND DESIGN INTENT SHALL BE CORRECTED BY CONTRACTOR AT CONTRACTOR'S EXPENSE. ADDITIONAL SURVEYING TO CONFIRM ELEVATIONS AFTER CORRECTIVE MEASURES SHALL ALSO BE AT CONTRACTOR'S EXPENSE.
- REQUIREMENTS FOR VARIOUS SURFACING CONDITIONS ARE AS FOLLOWS:
- DIRT: NOT LESS THAN 2% (1/4" PER FOOT) SLOPE IN DIRECTION OF SURFACE DRAINAGE AND 0.10 FOOT MAXIMUM DEVIATION FROM DESIGN ELEVATION AT ANY LOCATION
- A.C. PAVEMENT: NOT LESS THAN 1% (1/8 INCH PER FOOT) SLOPE IN DIRECTION OF SURFACE DRAINAGE AND 0.04 FOOT MAXIMUM DEVIATION FROM DESIGN ELEVATION AT ANY LOCATION
- CONCRETE: NOT LESS THAN 0.5% (1/16 INCH PER FOOT) SLOPE IN DIRECTION OF SURFACE DRAINAGE AND 0.02 FOOT MAXIMUM DEVIATION FROM DESIGN ELEVATION AT ANY LOCATION UNLESS NOTED OTHERWISE ON PLANS.

- TRENCHING AND BACKFILL NOTES:
- 1. ALL TRENCHING, BEDDING AND BACKFILL MATERIAL AND CONSTRUCTION, SHALL BE IN ACCORDANCE WITH THESE PLANS INCLUDING THE PIPE TRENCH DETAIL.
- 2. TRENCH OR STRUCTURE EXCAVATION SUBGRADE SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF BEDDING MATERIAL OR FORMS. WET OR UNSTABLE SOIL ENCOUNTERED IN THE BOTTOM OF THE EXCAVATION AND DEEMED BY THE GEOTECHNICAL ENGINEER TO BE INCAPABLE OF PROPERLY SUPPORTING THE PIPE OR STRUCTURE BEING CONSTRUCTED. SHALL BE REMOVED TO THE DEPTH RECOMMENDED BY THE GEOTECHNICAL ENGINEER AND THI EXCAVATION BACKFILLED TO THE BOTTOM OF THE PIPE OR STRUCTURE GRADE WITH SUITABLE MATERIAL RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- 3. WATER ENCOUNTERED IN TRENCH OR STRUCTURE EXCAVATION SHALL BE REMOVED BY THE CONTRACTOR TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER TO PROVIDE DRY CONDITIONS DURING CONSTRUCTION OF PIPE OR STRUCTURE.
- 4. BEDDING AND BACKFILL MATERIAL AND COMPACTED DENSITY, SHALL BE TESTED FOR COMPLIANCE WITH APPLICABLE REQUIREMENTS BY THE GEOTECHNICAL ENGINEER.
- 5. BEDDING AND PIPE ZONE BACKFILL MATERIAL, SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY, TRENCH BACKELL, SHALL BE COMPACTED TO NOT LESS THAN 90% OF MAXIMUM DENSITY. THE UPPER 12" BELOW THE BASE OR SUB-BASE COURSE IN PAVED AND OTHER TRAFFIC AREAS AND BELOW THE CONCRETE OR SAND COURSE IN WALKWAY AREAS SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY. BACKFILL COMPACTION SHALL BE TESTED FOR COMPLIANCE WITH THESE REQUIREMENTS IN ACCORDANCE WITH ASTM D-1557, LATEST REVISION, AND REPORTED BY THE GEOTECHNICAL ENGINEER.
- 6. CLASS I OR CLASS II (TRENCH) BACKFILL SHALL NOT BE PLACED UNTIL BEDDING AND INITIAL (PIPE ZONE) BACKFILL HAVE BEEN OBSERVED, TESTED AND APPROVED.
- 7. COMPACTION BY FLOODING OR JETTING IS NOT PERMITTED.
- 8. CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT(S), THE PROJECT WORK AREA AND VICINITY, AND SHALL FAMILIARIZE HIMSELF WITH THE WORK AREA CONDITIONS, CONTRACTOR SHALL MAKE HIS OWN DEDUCTIONS AND CONCLUSIONS AS TO HOW EXISTING SURFACE AND SUB-SURFACE CONDITIONS WILL AFFECT OR BE AFFECTED BY HIS CONSTRUCTION OPERATIONS, INCLUDING THE NATURE OF MATERIALS TO BE EXCAVATED. THE DEGREE OF DIFFICULTY ASSOCIATED WITH MAKING AND MAINTAINING THE REQUIRED EXCAVATIONS. AND THE DEGREE OF DIFFICULTY WHICH MAY ARISE FROM SUBSURFACE CONDITIONS INCLUDING GROUNDWATER, AND SHALL ACCEPT FULL RESPONSIBILITY THEREOF
- 9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE INTEGRITY OF EXISTING PAVEMENT ALONG AND BEHIND THE TRENCH SAWCUT LINES DURING CONSTRUCTION. IF THIS PAVEMENT IS BROKEN-OFF OR OTHERWISE DAMAGED BEFORE NEW PAVEMENT IS PLACED. CONTRACTOR SHALL SAWCUT A NEW CONFORM LINE PARALLEL WITH, FULL LENGTH OF, AND SUFFICIENT DISTANCE (1-FOOT MINIMUM) BEHIND ORIGINAL SAWCUT SO AS TO REMOVE DAMAGED PAVEMENT AND / OR RREGULARITY ALONG THE CONFORM LINE.

STORM DRAIN NOTES:

- ALL PRIVATE STORM DRAIN MATERIAL AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS INCLUDING THE PIPE TRENCH DETAIL
- 2. CONTRACTOR SHALL SCHEDULE STORM DRAIN WORK AHEAD OF OTHER UNDERGROUND CONDUIT CONSTRUCTION.
- 3. GRAVITY STORM DRAIN WORK SHALL BEGIN AT THE LOWEST POINT OF DISCHARGE AND PROCEED UPSTREAM.
- REINFORCED CONCRETE PIPE (RCP) AND FITTINGS SHALL BE CLASS III PER ASTM C76-20. PIPE AND FITTING INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES. CONNECTIONS TO CONCRETE STRUCTURES SHALL BE CONSTRUCTED WATERTIGHT USING MANUFACTURER'S RECOMMENDED MATERIALS AND METHODS.
- 5. GRATED CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLAN DETAIL SHOWN HEREON.
- 6. WITHIN TEN (10) WORKING DAYS OF COMPLETION OF THE STORM DRAIN SYSTEM AND BEFORE CONSTRUCTION OF PAVEMENT, WALKWAYS AND OTHER PERMANENT SURFACE IMPROVEMENTS, CONTRACTOR SHALL ENSURE TOP OF GRATE, COVER, INLET AND OUTLET INVERT ELEVATIONS OF ALL STORM DRAIN STRUCTURES MATCH PLANS AND ARE ACCURATE TO 0.01 FEET.

WATER NOTES:

- . ALL WATER LINE MATERIALS AND CONSTRUCTION, INCLUDING SERVICE LATERALS, SHALL COMPLY WITH THE UNIFORM PLUMBING CODE, CURRENT EDITION, AND WITH THE GOVERNING AGENCY CODE.
- 2. ALL WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF CRITERIA FOR SEPARATION OF WATER MAINS AND SANITARY SEWERS.
- 3. PVC C900 SDR 21 PIPE SHALL CONFORM TO ASTM D 1784 FOR GASKET. GASKET JOINTS SHALL CONFORM TO ASTM F 477.

SHALL CONFORM TO ASTM F 477. SOLVENT-WELD JOINTS SHALL CONFORM TO ASTM D2672.

- 4. PVC SCH 40 PIPE SHALL CONFORM TO ASTM D 1785 FOR GASKET OR SOLVENT-WELD. GASKET JOINTS
- 5. HDPE SDR 13.5 HDPE PIPE SHALL CONFORM TO ASTM D 3350, ASTM D 2837, AND AWWAC9036-07.
- 6. DI PIPE SHALL BE RATED TO 150 PSI MINIMUM AND SHALL CONFORM TO AWWA C150-08.
- 7. CONTRACTOR SHALL MAINTAIN RECORDS OF THE EXACT LOCATIONS OF ALL WATER VALVES, METERS, MAIN STUBS, AND LATERALS FOR THE PURPOSE OF PROVIDING A BASIS FOR CONSTRUCTION-RECORD DRAWINGS. SAID RECORD SHALL BE DELIVERED TO THE DEVELOPER'S ENGINEER PRIOR TO ACCEPTANCE OF THE WORK BY THE GOVERNING AGENCY.
- 8. ALL WATER METER BOXES AND VALVE BOX RIMS SHALL BE ADJUSTED TO FINISH GRADE IN PAVED
- 9. UPON COMPLETION OF WATER MAINS, THE CONTRACTOR SHALL HYDROSTATICALLY TEST BETWEEN EACH MAIN LINE VALVE PER ASTM F2164 AND AWWA M55. THE CONTRACTOR SHALL FURNISH A SUITABLE TEST PUMP, MEASURING DEVICE, MATERIALS, LABOR, EQUIPMENT, ETC., TO PERFORM THE TEST TO THE SATISFACTION OF THE ENGINEER. THE LINE SHALL BE FILLED SLOWLY, WITH CARE BEING TAKEN TO INSURE COMPLETE REMOVAL OF AIR FROM THE LINE. AFTER THE LINE HAS BEEN FILLED FACH PORTION BETWEEN VALVES SHALL BE HYDROSTATICALLY TESTED TO 150 PSI AND MAINTAINED FOR A PERIOD OF THREE (3) HOURS. ANY VISIBLE LEAKAGE SHALL BE REPAIRED TO A WATER-TIGHT CONDITION. DEFECTIVE MATERIALS DISCLOSED BY THE TEST SHALL BE REPLACED AND THE TEST REPEATED
- 10. BEFORE BEING CHLORINATED, THE ENTIRE LINE SHALL BE THOROUGHLY FLUSHED PER AWWA C651 AND MDH REGULATIONS. THE FLUSHING SHALL BE DONE AFTER THE PRESSURE TESTS ON THE LINE ARE MADE.
- 11. THE LINE SHALL BE CHLORINATED IN ACCORDANCE WITH AWWA STANDARD C 601-54, AWWA C651, AND MDH REGULATIONS. THE CHLORINATING AGENT SHALL BE APPLIED AT THE BEGINNING OF THE SECTION ADJACENT TO THE FEEDER CONNECTION AND SHALL BE INJECTED THROUGH A CORPORATION COCK, HYDRANT OR OTHER CONNECTION INSURING TREATMENT OF THE ENTIRE LINE. MAINS PREVIOUSLY FILLED SHALL BE TREATED TO A CONCENTRATED DOSAGE AT INTERVALS ALONG THE LINE AND RETAINED FOR A PERIOD OF TWENTY-FOUR (24) HOURS OR MORE. A RESIDUAL OF NOT LESS THAN 10 PPM SHALL BE PRODUCED IN ALL PARTS OF THE LINE. DURING THE CHLORINATING PROCESS ALL VALVES AND ACCESSORIES SHALL BE OPERATED BY THE CONTRACTOR. AFTER CHI ORINATION THE WATER SHALL BE FLUSHED FROM THE LINE PER AWWA C655. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COLLECT THE SAMPLES AND TO HAVE THE TEST CONDUCTED BY THE APPROVED LABORATORY, AND TO PROVIDE A CERTIFICATE OF SAME. A SAMPLE SHOWING "NO COLIFORM PRESENT" SHALL CONSTITUTE A SATISFACTORY SAMPLE WHEN ANALYZED BY THE MISSISSIPPI STATE DEPARTMENT OF HEALTH ENVIRONMENTAL LABORATORY OR A LABORATORY CERTIFIED BY THE MSDH.

DEMOLITION NOTES:

- THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY THE AVAILABLE RECORDS PROVIDED. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATION OF SAID LINES, NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO WORK OR POTHOLE TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OR PROTECTION OF ALL EXISTING UTILITY LINES.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND OR BELOW GROUND UNLESS NOTED OTHERWISE, ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND/OR STATE LAWS AT NO COST TO THE OWNER.
- 3. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS
- 4. ALL JOIN LINES SHALL BE SAWCUT ON A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING, AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO JOINING.
- 5. ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENTS INCLUDING BUT NOT LIMITED TO BUILDING FOUNDATIONS UTILITIES APPURTENANCES TREES SIGNS, STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS NOTED OTHERWISE HEREIN, OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- 6. THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING PAVING IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL REMOVED MATERIALS, AND ALL ASSOCIATED COSTS.

CONCRETE PAVEMENT AND APPURTENANT CONCRETE NOTES:

- UNLESS MODIFIED OR OTHERWISE SPECIFIED BY THE CONSTRUCTION NOTES THAT FOLLOW HEREON INCLUDING THOSE UNDER SEPARATE HEADINGS, PRIVATE ROADWAY MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), CURRENT EDITION PER LOCATION.
- COMPACTION OF FILL, SUBGRADE AND BASE COURSES AS WELL AS ALL TRENCH BEDDING AND BACKFILL SHALL BE OBSERVED AND TESTED FOR COMPLIANCE WITH APPLICABLE REQUIREMENTS BY THE GEOTECHNICAL ENGINEER.
- CONCRETE FOR DRIVEWAYS, DRAINAGE STRUCTURES, AND PAVEMENT SHALL BE RATED TO 4000 PSI. REINFORCING STEEL SHALL BE GRADE 60 BILLET STEEL CONFORMING TO ASTM A 615. STEEL BENDING PROCESS SHALL CONFORM TO THE REQUIREMENTS OF MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE. BENDING OR STRAIGHTENING SHALL BE ACCOMPLISHED SO THAT THE STEEL WILL NOT BE DAMAGED. KINKED BARS SHALL NOT BE USED.
- 5. JOINTS IN CONCRETE PAVEMENT A. WEAKENED PLANE CRACK CONTROL (CONTRACTION) JOINTS SHALL BE CONSTRUCTED AT REGULAR INTERVALS NOT EXCEEDING 10-FEET EACH WAY (LONGITUDINAL AND TRANSVERSE) AND AT ADDITIONAL LOCATIONS AS MAY BE CALLED FOR IN THE FIELD. JOINTS SHALL BE CONSTRUCTED PER SUBSECTION 303-5.4.2 OF THE SSPWC AS MODIFIED BY THE PLAN DETAILS AND THESE NOTES. REINFORCEMENT SHALL BE CONTINUOUS THROUGH JOINTS. DEPTH OF JOINTS SHALL BE 1/4 SLAB THICKNESS + 1/2-INCH (I.E., 2-INCHES FOR 6-INCH SLAB), JOINTS SHALL BE CONSTRUCTED BY SAWCUTTING GROOVES AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT RAVELING (USUALLY 4 TO 24 HOURS AFTER PLACEMENT). JOINTS SHALL BE FILLED WITH JOINT SEALANT (SIKAFLEX-2CNS OR EQUIVALENT, COLOR LIMESTONE GRAY) AS SOON AFTER COMPLETION OF THE CURING PERIOD AS IS FEASIBLE AND BEFORE PAVEMENT IS OPENED TO TRAFFIC. JOINTS SHALL BE CLEANED OF ALL FOREIGN MATERIAL, INCLUDING MEMBRANE CURING COMPOUNDS, AND SHALL BE SURFACE-DRY WHEN SEALANT IS INSTALLED. JOINT LOCATIONS SHALL BE ADJUSTED AS NECESSARY TO ALIGN WITH THOSE ALREADY CONSTRUCTED IN EXISTING ADJACENT (CONTIGUOUS) FEATURES SUCH AS CURBS AND GUTTERS. ALONG CURVES, TRANSVERSE JOINTS SHALL BE RADIAL.
- B. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS CALLED FOR ON THE PLANS. JOINTS SHALL BE CONSTRUCTED PER SUBSECTION 303-5.4.2 AS MODIFIED BY THE PLAN DETAILS AND THESE NOTES. JOINTS SHALL BE CONSTRUCTED 1/2-INCH WIDE USING ONE PIECE OF PREFORMED JOINT FILLER INSTALLED FROM BOTTOM OF SLAB TO WITHIN 1" OF CONCRETE SURFACE. THE RESULTING RESERVOIR SHALL BE FILLED WITH JOINT SEALANT TO WITHIN 1/4" OF CONCRETE SURFACE AS SOON AFTER COMPLETION OF THE CURING PERIOD AS IS FEASIBLE AND BEFORE PAVEMENT IS OPENED TO TRAFFIC. JOINTS SHALL BE CLEANED OF ALL FOREIGN MATERIAL, INCLUDING MEMBRANE CURING COMPOUND, AND SHALL BE SURFACE-DRY WHEN SEALANT IS INSTALLED, REINFORCING BARS SHALL BE INTERRUPTED 3 INCHES CLEAR OF EXPANSION JOINTS AND MINIMUM 14-INCH LONG SMOOTH DOWELS INSTALLED ACROSS, AND CENTERED ON, THE JOINT. DOWEL DIAMETER SHALL BE 1/8 SLAB THICKNESS (I.E., 1" FOR 8" SLAB, 3/4" FOR 6" SLAB). ONE-HALF (ONE END) OF THE DOWEL SHALL BE INSTALLED WITHIN A "SPEED DOWEL" TUBE WITH A 1-INCH GAP BETWEEN THE END OF THE DOWEL AND THE SEALED END OF THE TUBE. DOWELS SHALL BE INSTALLED AT 12 INCHES ON CENTER HORIZONTALLY, CENTERED IN THE SLAB VERTICALLY, AND A MINIMUM OF 3 INCHES CLEAR OF ANY REBAR. JOINT LOCATIONS SHALL BE ADJUSTED AS NECESSARY TO ALIGN WITH THOSE ALREADY CONSTRUCTED IN EXISTING ADJACENT (CONTIGUOUS) FEATURES SUCH AS CURBS AND GUTTERS. ALONG CURVES. TRANSVERSE JOINTS SHALL BE RADIAL.
- APPLY BROOM FINISH TO ALL FLATWORK SURFACES IN CON OR MEDIUM-COARSE TEXTURE AND COARSENESS 14. ALL EXISTING AND PROPOSED VALVE AND UTILITY BOXES AND MANHOLE FRAMES AND COVERS SHALL
- BE ADJUSTED TO FINISH GRADE. 15. AFTER CONSTRUCTION OF CONCRETE PAVEMENT AND APPURTENANT CONCRETE FEATURES, A FLOOD TEST SHALL BE CONDUCTED TO REVIEW SURFACE DRAINAGE, AS FOLLOWS: A. WATER SHALL BE SUPPLIED AND DISCHARGED IN SUFFICIENT QUANTITY TO COMPLETELY WET AND
- COVER ALL PAVEMENT AND CONCRETE GUTTER AREAS; THE OUTLINE LIMITS OF RESIDUAL STANDING/PONDED WATER SHALL THEN BE MARKED B. CONCRETE IMPROVEMENTS SHALL BE REMOVED AND REPLACED, AT NO ADDITIONAL COST TO THE OWNER, AS NECESSARY TO PROVIDE POSITIVE SURFACE DRAINAGE AND TO PREVENT PONDING OF WATER ON PAVEMENT SURFACES AND IN GUTTERS C. ADDITIONAL FLOOD TESTING SHALL BE CONDUCTED TO CONFIRM SUCCESS OF CORRECTIVE
- MFASURFS D. WHERE SAWCUT LINE IS CONSTRUCTED ALONG CONFORM LINE WITH EXISTING A.C. PAVEMENT, IT IS CONTRACTOR'S RESPONSIBILITY TO PROTECT THE INTEGRITY OF THE PAVEMENT ALONG AND BEHIND THE SAWCUT LINE DURING CONSTRUCTION: IF THIS PAVEMENT IS BROKEN-OFF OR OTHERWISE DAMAGED BEFORE NEW PAVEMENT IS PLACED. CONTRACTOR SHALL SAWCUT A NEW CONFORM LINE PARALLEL WITH, FULL LENGTH OF, AND SUFFICIENT DISTANCE BEHIND ORIGINAL SAWCUT SO AS TO REMOVE DAMAGED PAVEMENT AND/OR IRREGULARITY ALONG THE CONFORM LINE

USE OF PLANS:

THIS DRAWING IS PROVIDED IN AN ELECTRONIC FORMAT AS A COURTESY, IF REQUESTED BY THE USER. THE DELIVERY OF THE ELECTRONIC FILE DOES NOT CONSTITUTE THE DELIVERY OF OUR PROFESSIONAL WORK PRODUCT. THE SIGNED HARD COPY PREPARED FOR THE PROJECT CONSTITUTES OUR PROFESSIONAL WORK PRODUCT AND THE HARD COPY MUST BE REFERRED TO FOR THE CORRECT DESIGN INFORMATION. THESE PLANS HAVE BEEN PREPARED SOLELY FOR USE FOR THE PROJECT SCOPE AND SITE SPECIFICALLY IDENTIFIED HEREON AT THE TIME THESE PLANS ARE SIGNED. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, USE OF ANY PART OF THESE PLANS, INCLUDING ANY NOTE OR DETAIL, FOR ANY UNAPPROVED OR REVISED PROJECT SCOPE. OR FOR ANY OTHER PROJECT AT THIS OR ANY OTHER SITE. USER AGREES TO INDEMNIFY AND HOLD HARMLESS ASHLEY & VANCE FOR ALL COSTS AND DAMAGES IF USED.

USE OF ELECTRONIC INFORMATION:

ELECTRONIC INFORMATION MAY BE PROVIDED BY THE ENGINEER FOR CONVENIENCE; UNDER NO CIRCUMSTANCES SHALL DELIVERY OF ELECTRONIC FILES FOR USE BY OTHERS BE DEEMED A SALE BY THE ENGINEER AND THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL THE ENGINEER BE LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES AS A RESULT OF THE USE OR REUSE OF THE ELECTRONIC FILES BY OTHERS.

ELECTRONIC INFORMATION IS INTENDED TO PROVIDE INFORMATION SUPPLEMENTAL AND SUBORDINATE TO THE CONSTRUCTION CONTRACT DOCUMENTS. LAYOUT AND CONSTRUCTION OF PROJECT ELEMENTS SHALL BE BASED ON DIMENSIONS AND INFORMATION INCLUDED ON THE SIGNED AND SEALED CONSTRUCTION CONTRACT DOCUMENTS WHICH SHALL CONTROL OVER FLECTRONIC INFORMATION USER IS RESPONSIBLE FOR CONFIRMING LOCATION OF PROPOSED IMPROVEMENTS BASED ON DIMENSIONS AND INFORMATION INCLUDED ON THE CONSTRUCTION CONTRACT DOCUMENTS; INCONSISTENCIES BETWEEN THE ELECTRONIC INFORMATION AND THE CONSTRUCTION CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION.

PROJECT ELEMENTS SUCH AS MANHOLES, CATCH BASINS, UTILITY VAULTS, VALVE ASSEMBLIES, STAIRS, RAMPS, WALLS, ETC. ARE SHOWN SCHEMATICALLY IN THE ELECTRONIC INFORMATION AND CONSTRUCTION OF THESE ELEMENTS SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION NOTES AND DETAILS PRESENTED OR REFERENCED IN THE SIGNED AND SEALED CONSTRUCTION CONTACT DOCUMENTS. IMPROVEMENTS CONSTRUCTED BASED ON FLECTRONIC INFORMATION AND IN CONFLICT WITH THE DRAWING DIMENSIONS DETAILS, AND THE CONSTRUCTION CONTRACT DOCUMENTS SHALL BE REMOVED AND CONSTRUCTED IN THE PROPER LOCATION AND DIMENSIONS AT CONTRACTOR'S SOLE EXPENSE.

DIGITAL DRAWINGS ARE TYPICALLY A COMPILATION OF DRAWINGS FROM A NUMBER OF SOURCES AND, AS SUCH, THERE IS INFORMATION IN THE ELECTRONIC FILE ISSUED BY THE ENGINEER THAT WAS NOT DEVELOPED BY THE ENGINEER AND IS NOT AUTHORIZED BY THE ENGINEER FOR USE BY OTHERS. ELECTRONIC INFORMATION PROVIDED BY THE ENGINEER SHALL ONLY BE APPLICABLE FOR IMPROVEMENTS DESIGNED BY THE ENGINEER AND WHICH ARE SPECIFICALLY DESIGNATED BY CONSTRUCTION NOTES AND/OR DETAILS ON THE SIGNED AND SEALED CONTRACT DOCUMENTS.

IF DIGITAL FILES ARE OBTAINED WITH THE INTENT TO USE THEM FOR PROJECT STAKING, THEY SHALL ONLY BE USED BY A QUALIFIED ENGINEER OR LAND SURVEYOR. DIGITAL INFORMATION SHALL ONLY BE USED FOR STAKING HORIZONTAL LOCATION OF PROPOSED IMPROVEMENTS AFTER IT HAS BEEN CONFIRMED WITH THE SIGNED AND SEALED CONSTRUCTION CONTRACT DOCUMENTS

THE DIGITAL DRAWINGS ARE NOT INTENDED TO BE USED DIRECTLY FOR CONTROL OF CONTRACTOR'S GRADING OPERATIONS WITHOUT STAKING BY ENGINEER OR LAND SURVEYOR. THE INTERSECTION OF PROPOSED CUT AND FILL SLOPES WITH EXISTING GRADE IS APPROXIMATE WHERE SHOWN ON THE DRAWINGS AND SHALL BE CONFIRMED BY FIELD STAKING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT SLOPES IN CONFORMANCE WITH THE SPECIFIED AND DETAILED REQUIREMENTS CONTAINED IN THE CONTRACT DOCUMENTS.

contact with these plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: REV. DATE DESCRIPTION STAME:	
art, is prohibited. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual	ASHEV&VANCE ENGINEERING, INC	1413 Monterey Street 1413 Monterey Street San Luis Obispo, CA 93401 (805) 545-0010 CIVIL • STRUCTURAL www.ashleyvance.com
or which they were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in p	TERRAN R TEST FACILITY	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
lese plans and specifications shall be restricted to the original site for $\overline{\mathbf{w}}$	NOTES PRINT DATE: DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NO:	SHEET 08/11/2023 BRJ BRJ PER PLAN 211524 0_2

SITE CONSTRUCTION NOTES:

- () CONSTRUCT ROAD BASE SECTION PER DETAIL 1, SHEET C-4.1.
- 2 CONSTRUCT CONCRETE PAVEMENT SECTION PER DETAIL 2, SHEET C-4.1.
- 3 CONSTRUCT CONCRETE DRAINAGE TRENCH PER DETAIL 3, SHEET C-4.1.
- (4) CONSTRUCT CONCRETE WALKWAY SECTION AND CURB PER DETAIL 4, SHEET C-4.1.
- 5 CONSTRUCT CONCRETE FOUNDATION PER STRUCTURAL PLANS.
- 6 CONSTRUCT CONCRETE EXHAUST FLUME PER SEPARATE PLANS.

WATER CONSTRUCTION NOTES:

- (W1) CONSTRUCT 12-INCH CONNECTION TO EXITING WATER MAIN.
- W2 CONSTRUCT 12-INCH C900 PVC WATER LINE.
- W3 CONSTRUCT 12-INCH RISER, BEND, GATE VALVE AND BIND FLANGE FOR FUTURE CONNECTION.
- (W4) CONSTRUCT 48-INCH STEEL WATER MAIN.

ELECTRICAL CONSTRUCTION NOTES:

- E1 CONSTRUCT ELECTRICAL SERVICE CONDUIT.
- E2 CONSTRUCT COMMUNICATION SERVICE CONDUIT.
- E3 CONSTRUCT JOINT ELECTRICAL / COMMUNICATION MANHOLE.

HORIZONTAL SCALE: 1" = 30'

60

ese plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: REV. DATE DESCRIPTION STAME:	
is prohibited. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual contact with th	ASHEV&VANCE ENGINEERING, INC	1413 Monterey Street San Luis Obispo, CA 93401 (805) 545-0010 CIVIL • STRUCTURAL www.ashleyvance.com
were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in part, is	PROJECT: TERRAN R TEST FACILITY STAGE 2 TEST STAND	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
e of these plans and specifications shall be restricted to the original site for which they w	SHEET TITLE: GRADINO PRINT DATE: DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NO: CHET NO:	G PLAN 08/11/2023 BRJ BRJ PER PLAN 211524 2.33

GENERAL NOTES:				
ALL EXISTING UTILITIES SHOWN ARE BASED ON THE BEST KNOWLEDGE AVAILABLE. CONTRACTOR TO POTHOLE ALL POINTS OF CONNECTION AND VERIFY ALL CLEARANCES. MATERIAL DEPTH AND LOCATION SHALL BE IDENTIFIED BY CONTRACTOR. IF THERE ARE AN DIFFERENCES FROM PLAN WITH ANY OF THESE ITEMS, ENGINEER OF WORK SHALL BE NOTIFIED IMMEDIATELY.	trictions. 🗲	NO		
BMP SELECTION & LEGEND.	lese rest	CRIPTI		
THE FOLLOWING BMPS SHALL BE USED IN THE CONTRACTOR STAGING AREA:	nce of th	DES		
CWA) CONCRETE WASHOUT AREA PER DETAIL 1, SHEET C-5.2.	acceptar	NOI		
(SP) STOCKPILE MANAGEMENT	of the a	CRIPT		
(SSA) STABILIZED STAGING AREA	vidence	DES		
	l facie e			
THE FOLLOWING BMPS ARE SPECIFIED ON THIS PLAN AND ARE TO BE INSTALLED OR	te prima	DA		
CONSTRUCTED PER GESC STANDARD PLANS AND DETAILS:	constitut	REV.		
VIC VEHICLE TRACKING CONTROL PER DETAIL 2, SHEET C-5.2.	ns shall	STAMP:		
(CD) CHECK DAM PER DETAIL 3, SHEET C-5.2.	cificatior			
	sering Inc. without prejudice. Visual contact with these plans and s	Ance	G, I N C	1413 Monterey Street uis Obispo, CA 93401 (805) 545-0010 ww.ashleyvance.com
	specifications remain with Ashley & Vance Enginee	Ashlev [®]	ENGINERINO	San Lui San Lui VIL•STRUCTURAL www
	ole or in part, is prohibited. Title to these plans and			<u>د</u>
	ey were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in wh	PROJECT: TERRAN R TEST FACILITY	STAGE 2 TEST STAND	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
	the original site for which th	SHEET TIT	ROS TRO	ION L PLAN
	and specifications shall be restricted to the	PRINT DAT DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NC	E:	08/11/2023 BRJ BRJ PER PLAN 211524
	e plans ;			:1
	of thes).
	le use			

TERRAN R TEST FACILITY - COPV

STENNIS SPACE CENTER, MISSISSIPPI

AC	ASPHALTIC CONCRETE
BLDG	BUILDING
BCR	BEGIN CURB RETURN
BVC	BEGIN VERTICAL CURV
BW	BOTTOM OF WALL
СВ	CATCH BASIN
C/L	CENTERLINE
CMU	CONCRETE MASONRY
CONC	CONCRETE
DW	DRIVEWAY
ECR	END CURB RETURN
EG	EXISTING GRADE
EP	EDGE OF PAVEMENT
EVC	END VERTICAL CURVE
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FS	FINISHED SURFACE
GB	GRADE BREAK

Scope included in the March 2025 submittal

TOP OF CURB, CONCRETE

TOP OF FOOTING

TOP OF GRATE

TOP OF WALL

VERTICAL CURVE

тс

TF

ΤG

ΤW

VC

SURVEY NOTES

EXISTING TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON PER SURVEY BY LAND & SEA SURVEYING CONCEPTS, INC. DATED 2021/11/11.

HORIZONTAL AND VERTICAL CONTROL BASED UPON NAD83 STATE PLANE COORDINATES, MISSISSIPPI, EAST ZONE 2301, AND NAVD88 UTILIZING NGS STATION M 366.

SURVEY MONUMENT PROTECTION:

PROTECT AND PRESERVE, IN PLACE, ALL SURVEY MONUMENTS AND BENCHMARKS DO NOT DISTURB, MOVE, OR RELOCATE MONUMENTS OR BENCHMARKS WITHOUT THE PRIOR REVIEW AND APPROVAL BY THE AGENCY HAVING JURISDICTION OVER THE MONUMENT OR BENCHMARK. THE CONTRACTOR SHALL CONTRACT WITH A LICENSED SURVEYOR FOR MONUMENTS REQUIRING DISTURBANCE OR REMOVAL AND THE SURVEYOR SHALL RESET THE MONUMENTS OR PROVIDE PERMANENT WITNESS MONUMENTS AND FILE THE REQUIRED DOCUMENTATION WITH THE AUTHORITY HAVING JURISDICTION, PURSUANT TO ALL APPLICABLE BUSINESS AND PROFESSIONAL CODES.

SHEET INDEX

SHEET	SHEET TITLE
C-0.1	TITLE SHEET
C-0.2	NOTES SHEET
C-2.1	GRADING PLAN
C-2.2	GRADING PLAN
C-4.1	DETAIL SHEET
C-5.1	EROSION CONTR
C-5.2	EROSION CONTR

STANDARD ABBREVIATIONS				PROJECT INFORM	EXISTING UTILITY L		
AC	ASPHALTIC CONCRETE	IE	INVERT ELEVATION	CLIENT:	RELATIVITY SPACE	PRIOR TO COMMENCING C	
BLDG	BUILDING	INV	INVERT			OR (504) 258-1176 TO COO	
BCR	BEGIN CURB RETURN	LA	LANDSCAPE AREA	GEOTECHNICAL:	TERRACON CONSULTANTS, INC. 859 PEAR ORCHARD BIDCELAND, MS 20157		
BVC	BEGIN VERTICAL CURVE	NG	NATURAL GRADE		RIDGELAND, MS 39137		
BW	BOTTOM OF WALL	PA	PLANTER AREA		INTERTEK PSI 724 CENTRAL AVENUE JEEEERSON JA 70121		
СВ	CATCH BASIN	PCC	PORTLAND CEMENT CONCRETE				
C/L	CENTERLINE	_ //		SURVEYOR:	LAND & SEA SURVEYING CONCEPTS, INC.		
CMU	CONCRETE MASONRY UNIT	P/L	PROPERTY LINE		1605 CHASE HAMMOCK ROAD MERRITT ISLAND, EL 32953		
OMO		POC	POINT OF CONNECTION		WENTT ISLAND, TE 52555		
CONC	CONCRETE	DC					
DW	DRIVEWAY	P3	PARKING STRIFE	GRADING INFORMAT	ION*		
		PVC	POLYVINYL CHLORIDE	AREA DISTURBED:	1.93 AC		
ECR	END CURB RETURN	RW	RIGHT OF WAY				
EG	EXISTING GRADE			FILL QUANTITY:	12,200 CUBIC YARDS		
50		SD	STORM DRAIN	EXPORT QUANTITY:	11,000 CUBIC YARDS		
EP	EDGE OF PAVEMENT	SG	SUB-GRADE ELEVATION	IMPORT QUANTITY:	11,550 CUBIC YARDS		
EVC	END VERTICAL CURVE						
		SS	SANITARY SEWER	*NOTE: THE ABOVE (QUANTITIES ARE FOR PLANNING AND PERMITTING PURPOSES		

*NOTE: THE ABOVE QUANTITIES ARE FOR PLANNING AND PERMITTING PURPOSES ONLY. SHRINKAGE; CONSOLIDATION AND SUBSIDENCE FACTORS; LOSSES DUE TO CLEARING AND DEMOLITION OPERATIONS; AND TRENCHING FOR UTILITIES AND FOUNDATIONS ARE NOT INCLUDED. ESTIMATED EARTHWORK QUANTITIES ARE BASED ON THE APPROXIMATE DIFFERENCE BETWEEN EXISTING GRADES AND PROPOSED FINISHED GRADES OR PAVEMENT SUBGRADES, AS INDICATED ON THE PLANS, AND SHOULD VARY ACCORDING TO THESE FACTORS AND LOSSES. THE CONTRACTOR SHALL PERFORM AN EARTHWORK ESTIMATE FOR THE PURPOSE OF PREPARING A LUMP SUM BID PRICE FOR EARTHWORK. THE BID PRICE SHALL INCLUDE COSTS FOR ANY NECESSARY IMPORT AND PLACEMENT OF EARTH MATERIALS OR THE EXPORT AND PROPER DISPOSAL OF EXCESS EARTH MATERIALS. ROL PLAN ROL DETAILS

CATION

OF ANY EXCAVATION, DIGGING, POT HOLING, ETC. AGER JACE OWENS AT JOWENS@RELATIVITYSPACE.COM ORDINATE MARKING OF EXISTING UTILITIES.

and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: REV: DATE DESCRIPTION STAME:	
. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual contact with these plans	AShigy & Vance Engineering, inc	1413 Monterey Street 1413 Monterey Street San Luis Obispo, CA 93401 (805) 545-0010 CIVIL • STRUCTURAL www.ashleyvance.com
or in part, is prohibited. Tit	•	₹●
were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole c	TERRAN R TEST FACILITY	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
e original site for which they	SHEET TITLE:	SHEET
use of these plans and specifications shall be restricted to th	PRINT DATE: DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NO:	02/18/2025 BRJ BRJ PER PLAN 211524

GENERAL NOTES:

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH UFC 1-200-01.
- 2. IN THE EVENT OF A CONFLICT BETWEEN ANY REFERENCED STANDARD, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- 3. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 4. BEFORE BEGINNING WORK, CONTRACTOR SHALL CONFIRM WITH AGENCIES HAVING JURISDICTION THAT ALL REQUIRED PERMITS AND LICENSES HAVE BEEN OBTAINED AND ALL REQUIRED NOTICES
- 5. UNDERGROUND AND OVERHEAD CONSTRUCTION IN ADDITION TO WHAT IS SHOWN ON THESE PLANS MAY BE PART OF THIS PROJECT, INCLUDING ARCHITECTURAL AND LANDSCAPE ARCHITECTURAL IMPROVEMENTS. ADDITIONAL PERMITS MAY BE REQUIRED.
- A. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK AND INTERFACING IMPROVEMENTS WITH WORK BY OTHER CONTRACTORS AT THIS JOB SITE AND WITH IMPROVEMENTS REQUIRED BY PLANS BY OTHERS.
- B. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR BUILDING AND SITE LAYOUT DIMENSIONING.
- C. CONTRACTOR SHALL REFER TO ARCHITECTURAL AND LANDSCAPE ARCHITECTURAL PLANS AND SPECIFICATIONS FOR SITE DEVELOPMENT CONSTRUCTION DETAILS AND DIMENSIONING. INCLUDING THOSE FOR BUILDINGS, PATIOS, WALKWAYS, DRIVEWAYS, WALLS/FENCES, PLUMBING, ELECTRICAL, UTILITIES, LANDSCAPING, AND IRRIGATION.
- 7. ALL SITE WORK AND TESTING SHALL BE DONE IN CONFORMANCE WITH THE RECOMMENDATIONS CONTAINED IN THE FOLLOWING GEOTECHNICAL ENGINEERING REPORT FOR THIS PROJECT:
- A. PREPARED BY: TERRACON CONSULTANTS, INC REPORT NUMBER: E4215031 DATE: 11/27/2021
- B. THIS REPORT AND ANY ADDENDA SHALL BE INCORPORATED INTO THESE PLANS AND MADE A PART HEREOF AS IF SPELLED OUT IN THEIR ENTIRETY HEREON. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE APPLICABLE GEOTECHNICAL REPORTS. CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER TO OBTAIN OR REVIEW COPIES OF THESE REPORTS AND ADDENDA.
- C. PRIOR TO BIDDING, CONTRACTOR SHALL CONTACT THE GEOTECHNICAL ENGINEER TO DETERMINE THE LOCATION AND DEPTH OF ALL TEST BORINGS AND EXPLORATORY PITS AND EXCAVATIONS. CONTRACTOR SHALL DETERMINE FROM THE GEOTECHNICAL ENGINEER WHAT REMEDIAL WORK IS RECOMMENDED TO MAKE THESE DISTURBED LOCATIONS SUITABLE FOR THE PROPOSED IMPROVEMENTS CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS FOR THE RECOMMENDED. REMEDIAL WORK AND SHALL ADJUST HIS OPERATIONS TO PROPERLY SEQUENCE THE WORK TO ACCOMMODATE REMEDIAL WORK WITH CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- 8. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE HEALTH AND SAFETY LAWS, ORDINANCES, REGULATIONS, RULES, AND STANDARDS INCLUDING ALL REQUIREMENTS OF OSHA
- 9 ALL UNSUITABLE CONSTRUCTION MATERIALS AND RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE; TRANSPORTED TO A SUITABLE LOCATION, AND DISPOSED OF IN A PROPER AND LEGAL MANNER
- 10. ALL WORK INVOLVING EXCAVATION, INCLUDING THAT FOR WATER, SEWER, STORM DRAIN AND UTILITY CONDUITS AND ALL SERVICE CONNECTIONS AND METER BOXES (NOT PERMITTED IN DRIVEWAYS) SHALL BE COMPLETED AND OBSERVED AND APPROVED BY THE AGENCY HAVING JURISDICTION AND THE STRUCTURAL BACKFILL OBSERVED AND TESTED FOR COMPACTION AND APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE AGGREGATE BASE, PAVING AND OTHER PERMANENT SURFACE CONSTRUCTION MAY COMMENCE.
- 11. BEFORE COMMENCING EXCAVATION, CONTRACTOR SHALL CONTACT PUBLIC WORKS AND UTILITY COMPANIES OR OTHER OWNERS OF SUBSURFACE FACILITIES WITHIN THE WORK SITE AND SHALL VERIFY WHETHER OR NOT A REPRESENTATIVE WILL BE PRESENT BEFORE AND/OR DURING EXCAVATION, AND SHALL DETERMINE SITE SPECIFIC REQUIREMENTS FOR EXCAVATION.
- 12. CONTRACTOR SHALL NOTIFY PUBLIC WORKS, BUILDING AND SAFETY, UTILITY COMPANIES GEOTECHNICAL ENGINEER, AND ENGINEER OF RECORD, AT LEAST 48 HOURS BEFORE START OF ANY CONSTRUCTION AND OF THE TIME AND LOCATION OF PRE-CONSTRUCTION CONFERENCE, AND SHALL DETERMINE FROM EACH PARTY THEIR SCOPE OF WORK TO BE OBSERVED AND BY WHOM, AND SCOPE OF TESTING. DURING THE COURSE OF WORK, CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR OBSERVATION AND TESTING AS STIPULATED PURSUANT TO ABOVE DETERMINATIONS. WORK NOT OBSERVED AND TESTED WILL BE SUBJECT TO REJECTION.
- 13. CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SUCH SHEETING, SHORING, BRACING, AND/OR OTHER PROTECTION AS IS NECESSARY TO PREVENT FAILURE OF TEMPORARY EXCAVATIONS AND EMBANKMENTS AND TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS, TEMPORARY IMPROVEMENTS, AND PARTIALLY COMPLETED PORTIONS OF THE WORK, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SUFFICIENCY OF SUCH SUPPORTS AND/OR OTHER PROTECTION PER ALL REQUIREMENTS OF OSHA
- 14. CONTRACTOR SHALL PROMPTLY NOTIFY ENGINEER OF RECORD AND AUTHORITY HAVING JURISDICTION BY TELEPHONE AND IN WRITING UPON DISCOVERY OF, AND BEFORE DISTURBING ANY PHYSICAL CONDITIONS DIFFERING FROM THOSE REPRESENTED BY APPROVED PLANS AND SPECIFICATIONS
- 5. CONTRACTOR SHALL MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL CHANGES OF CONSTRUCTION FROM THAT SHOWN ON THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING A BASIS FOR CONSTRUCTION OF RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF ENGINEER OF RECORD AND AUTHORITY HAVING JURISDICTION. UPON COMPLETION OF THE PROJECT. CONTRACTOR SHALL DELIVER THIS RECORD OF ALL CONSTRUCTION CHANGES TO ENGINEER ALONG WITH A LETTER WHICH DECLARES THAT, OTHER THAN THESE NOTED CHANGES, "THE PROJECT WAS CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS."
- WARNING: ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED IN WRITING BY PREPARER.
- 16. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND INDEMNIEY AND HOLD DESIGN PROFESSIONALS HARMLESS FROM ALL LIABILITY AND CLAIMS, REAL OR ALLEGED. IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT AND ACCEPTS LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONALS.
- 17. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL AND SAFETY AND SHALL FURNISH INSTALL AND MAINTAIN SUCH FENCING SIGNS LIGHTS TRENCH PLATES, BARRICADES, AND/OR OTHER PROTECTION AS IS NECESSARY FOR SAID CONTROL AND SAFFTY
- 18. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR PROTECTION OF PUBLIC AND PRIVATE PROPERTY AT OR IN THE VICINITY OF THE JOB SITE AND FURTHER AGREES TO, AT CONTRACTOR'S EXPENSE, REPAIR OR REPLACE TO ORIGINAL CONDITION, ALL EXISTING IMPROVEMENTS WITHIN OR IN THE VICINITY OF THE JOB SITE WHICH ARE NOT DESIGNATED FOR REMOVAL AND WHICH ARE DAMAGED OR REMOVED AS A RESULT OF CONTRACTOR'S OPERATIONS.

GENERAL GRADING NOTES:

- 1. GRADING SHALL BE IN CONFORMANCE WITH RECOMMENDATIONS MADE BY THE GEOTECHNICAL ENGINEER DURING OBSERVATION AND TESTING OF SITE DEMOLITION, PREPARATION, GRADING, AND DEVELOPMENT WORK. FOR ANY CONFLICT BETWEEN THESE PLANS AND THE RECOMMENDATIONS AND/OR SPECIFICATIONS OF THE GEOTECHNICAL ENGINEER, THE MORE STRINGENT PROVISION SHALL GOVERN.
- AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION (EXCEPT TREES INDICATED TO REMAIN), INCLUDING ROOTS AND ROOT STRUCTURES, OTHER ORGANIC MATERIAL, DEBRIS. NON-COMPLYING FILL, AND OTHER MATERIAL UNSUITABLE FOR SUPPORT OF FILL AND/OR PROPOSED IMPROVEMENTS, AS RECOMMENDED BY AND UNDER THE OBSERVATION AND TESTING OF THE GEOTECHNICAL ENGINEER. CALL THE INSPECTOR FOR INITIAL INSPECTION.
- ALL UNSUITABLE SOIL MATERIALS AND RUBBISH AND DEBRIS RESULTING FROM DEMOLITION AND GRADING OPERATIONS SHALL BE REMOVED FROM THE JOB SITE; TRANSPORTED TO A SUITABLE LOCATION AND DISPOSED OF IN A PROPER AND LEGAL MANNER.
- 4. AREAS TO RECEIVE FILL MATERIAL AND AREAS TO RECEIVE BUILDINGS, EXTERIOR SLABS, WALKWAYS, WALLS, PAVEMENT AND OTHER STRUCTURAL IMPROVEMENTS SHALL BE PREPARED AS RECOMMENDED BY AND UNDER THE OBSERVATION AND TESTING OF THE GEOTECHNICAL ENGINEER. RECOMMENDATIONS FOR OVER EXCAVATION, ADDITIONAL SCARIFICATION, BACKFILL AND RECOMPACTION ARE CONTAINED IN THE PROJECT GEOTECHNICAL REPORT REFERENCED IN THE GENERAL NOTES ON THESE PLANS.
- PRIOR TO PLACEMENT OF FILL AND BACKFILL MATERIAL, THE PREPARED AREA SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR. THE GEOTECHNICAL ENGINEER SHALL ALSO OBSERVE THE AREAS TO BE FILLED. ALLOW A MINIMUM 48-HOUR NOTICE. FILL AND BACKFILL PLACED ON THE PREPARED AREA WITHOUT THE REQUIRED OBSERVATION SHALL BE REMOVED.
- ALL FILL MATERIAL, WHETHER EXCAVATED ON-SITE OR IMPORTED FROM OFF-SITE, SHALL BE TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. IMPORTED FILL MATERIAL SHALL BE EQUAL TO OR BETTER IN QUALITY THAN THE ON-SITE SOILS AND SHALL CONFORM TO THE RECOMMENDATION OF THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL TEST AND APPROVE THE SOIL PROPOSED FOR IMPORT FOR STRUCTURAL FILL PRIOR TO IMPORTATION TO THE SITE. THE LANDSCAPE ARCHITECT AND THE GEOTECHNICAL ENGINEER SHALL TEST AND APPROVE THE SOIL PROPOSED FOR IMPORT FOR LANDSCAPE AREA SURFACE MATERIAL PRIOR TO IMPORTATION TO THE SITE.
- CONTRACTOR SHALL REFER TO THE FOLLOWING AS APPLICABLE: - ARCHITECT'S PLANS FOR ADDITIONAL GRADING REQUIREMENTS IN BUILDING AREAS. - LANDSCAPE ARCHITECT'S PLANS FOR TREE PRESERVATION REQUIREMENTS AND FOR SUBGRADE ALLOWANCES IN LANDSCAPE AREAS. - PUBLIC IMPROVEMENT PLANS FOR INTERFACING WITH PUBLIC GRADING, PAVING, STORM DRAINAGE AND UTILITY IMPROVEMENTS.
- 8. WHERE PLANTER AREAS ARE SHOWN ON THE PLANS ADJACENT TO BUILDINGS AND ARE CONTAINED BY WALKS / FLATWORK LESS THAN 8" BELOW BOTTOM OF SILL PLATE OR WHERE ADJACENT FINISH GRADE OUTSIDE A BUILDING IS SHOWN TO BE LESS THAN 8" BELOW BOTTOM OF SILL PLATE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT BUILDING PLANS CALL FOR APPROPRIATE DAMPPROOF OR WATERPROOF CONSTRUCTION AND IS CONSTRUCTED IN ACCORDANCE WITH ALL BUILDING APPLICABLE CODE REQUIREMENTS
- PLAN ELEVATIONS SHOWN ON SOIL AND LANDSCAPED AREAS ARE FINISH GRADE (FINISH SURFACE) ELEVATIONS INTENDED TO ESTABLISH SURFACE DRAINAGE CONTROL FOR THESE AREAS. DURING GRADING OPERATIONS, THICKNESSES (SUBGRADE ALLOWANCES) SPECIFIED BY LANDSCAPE ARCHITECT FOR TURF, WOOD CHIPS, MULCH, ETC. SHALL BE SUBTRACTED FROM THESE ELEVATIONS TO ESTABLISH FINISH SUBGRADE.
- 10. BEFORE PLACEMENT OF AGGREGATE BASE OR SUBBASE MATERIAL IN PAVEMENT AREAS, THE SUBGRADE SOIL SHALL BE REVIEWED AND TESTED BY THE GEOTECHNICAL ENGINEER. DURING PAVING OPERATIONS, STRUCTURAL SECTION COMPACTION SHALL BE OBSERVED AND TESTED BY THE GEOTECHNICAL ENGINEER.
- 11. QUALITY REVIEW AND REPORTING REQUIREMENTS.
- A. GRADING AND IMPROVEMENTS FOUND NOT IN CONFORMANCE WITH APPROVED PLANS AND DESIGN INTENT SHALL BE CORRECTED BY CONTRACTOR AT CONTRACTOR'S EXPENSE. ADDITIONAL SURVEYING TO CONFIRM ELEVATIONS AFTER CORRECTIVE MEASURES SHALL ALSO BE AT CONTRACTOR'S EXPENSE.
- REQUIREMENTS FOR VARIOUS SURFACING CONDITIONS ARE AS FOLLOWS:
- DIRT: NOT LESS THAN 2% (1/4" PER FOOT) SLOPE IN DIRECTION OF SURFACE DRAINAGE AND 0.10 FOOT MAXIMUM DEVIATION FROM DESIGN ELEVATION AT ANY LOCATION
- A.C. PAVEMENT: NOT LESS THAN 1% (1/8 INCH PER FOOT) SLOPE IN DIRECTION OF SURFACE DRAINAGE AND 0.04 FOOT MAXIMUM DEVIATION FROM DESIGN ELEVATION AT ANY LOCATION
- CONCRETE: NOT LESS THAN 0.5% (1/16 INCH PER FOOT) SLOPE IN DIRECTION OF SURFACE DRAINAGE AND 0.02 FOOT MAXIMUM DEVIATION FROM DESIGN ELEVATION AT ANY LOCATION UNLESS NOTED OTHERWISE ON PLANS.

TRENCHING AND BACKFILL NOTES:

- 1. ALL TRENCHING, BEDDING AND BACKFILL MATERIAL AND CONSTRUCTION, SHALL BE IN ACCORDANCE WITH THESE PLANS INCLUDING THE PIPE TRENCH DETAIL.
- 2. TRENCH OR STRUCTURE EXCAVATION SUBGRADE SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF BEDDING MATERIAL OR FORMS. WET OR UNSTABLE SOIL ENCOUNTERED IN THE BOTTOM OF THE EXCAVATION AND DEEMED BY THE GEOTECHNICAL ENGINEER TO BE INCAPABLE OF PROPERLY SUPPORTING THE PIPE OR STRUCTURE BEING CONSTRUCTED. SHALL BE REMOVED TO THE DEPTH RECOMMENDED BY THE GEOTECHNICAL ENGINEER AND THE EXCAVATION BACKFILLED TO THE BOTTOM OF THE PIPE OR STRUCTURE GRADE WITH SUITABLE
- 3. WATER ENCOUNTERED IN TRENCH OR STRUCTURE EXCAVATION SHALL BE REMOVED BY THE CONTRACTOR TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER TO PROVIDE DRY CONDITIONS DURING CONSTRUCTION OF PIPE OR STRUCTURE.
- 4. BEDDING AND BACKFILL MATERIAL AND COMPACTED DENSITY, SHALL BE TESTED FOR COMPLIANCE WITH APPLICABLE REQUIREMENTS BY THE GEOTECHNICAL ENGINEER.
- 5. BEDDING AND PIPE ZONE BACKFILL MATERIAL, SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY. TRENCH BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 90% OF MAXIMUM DENSITY THE UPPER 12" BELOW THE BASE OR SUB-BASE COURSE IN PAVED AND OTHER TRAFFIC. AREAS AND BELOW THE CONCRETE OR SAND COURSE IN WALKWAY AREAS SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY. BACKFILL COMPACTION SHALL BE TESTED FOR COMPLIANCE WITH THESE REQUIREMENTS IN ACCORDANCE WITH ASTM D-1557, LATEST REVISION, AND REPORTED BY THE GEOTECHNICAL ENGINEER.
- 6. CLASS I OR CLASS II (TRENCH) BACKFILL SHALL NOT BE PLACED UNTIL BEDDING AND INITIAL (PIPE ZONE) BACKFILL HAVE BEEN OBSERVED, TESTED AND APPROVED.
- 7. COMPACTION BY FLOODING OR JETTING IS NOT PERMITTED.

MATERIAL RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

- 8. CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT(S), THE PROJECT WORK AREA AND VICINITY, AND SHALL FAMILIARIZE HIMSELF WITH THE WORK AREA CONDITIONS, CONTRACTOR SHALL MAKE HIS OWN DEDUCTIONS AND CONCLUSIONS AS TO HOW EXISTING SURFACE AND SUB-SURFACE CONDITIONS WILL AFFECT OR BE AFFECTED BY HIS CONSTRUCTION OPERATIONS, INCLUDING THE NATURE OF MATERIALS TO BE EXCAVATED. THE DEGREE OF DIFFICULTY ASSOCIATED WITH MAKING AND MAINTAINING THE REQUIRED EXCAVATIONS, AND THE DEGREE OF DIFFICULTY WHICH MAY ARISE FROM SUBSURFACE CONDITIONS INCLUDING GROUNDWATER, AND SHALL ACCEPT FULL RESPONSIBILITY THEREOF.
- 9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE INTEGRITY OF EXISTING PAVEMENT ALONG AND BEHIND THE TRENCH SAWCUT LINES DURING CONSTRUCTION. IF THIS PAVEMENT IS BROKEN-OFF OR OTHERWISE DAMAGED BEFORE NEW PAVEMENT IS PLACED. CONTRACTOR SHALL SAWCUT A NEW CONFORM LINE PARALLEL WITH, FULL LENGTH OF, AND SUFFICIENT DISTANCE (1-FOOT MINIMUM) BEHIND ORIGINAL SAWCUT SO AS TO REMOVE DAMAGED PAVEMENT AND / OR RREGULARITY ALONG THE CONFORM LINE.

STORM DRAIN NOTES:

- ALL PRIVATE STORM DRAIN MATERIAL AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS INCLUDING THE PIPE TRENCH DETAIL
- 2. CONTRACTOR SHALL SCHEDULE STORM DRAIN WORK AHEAD OF OTHER UNDERGROUND CONDUIT CONSTRUCTION.
- 3. GRAVITY STORM DRAIN WORK SHALL BEGIN AT THE LOWEST POINT OF DISCHARGE AND PROCEED UPSTREAM.
- POLYVINYL CHLORIDE (PVC) PIPE FOR 4" THROUGH 8" SIZE SHALL COMPLY WITH THE MOST RECENT ISSUE OF ASTM STANDARD D-3034 (SDR 35), PVC PIPE SHALL HAVE AN INTEGRALLY MOLDED BELL OR SOCKET END FOR GASKETED JOINT ASSEMBLY. JOINTS AND GASKETS SHALL COMPLY WITH THE MOST RECENT ISSUE OF ASTM STANDARD D-3212. PVC PIPE INSTALLATION SHALL COMPLY WITH UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD UNI-B-5, LATEST REVISION. PVC PIPE CONNECTIONS TO MANHOLES, CATCH BASINS AND OTHER CONCRETE STRUCTURES SHALL BE CONSTRUCTED WITH WATERSTOP AT MIDPOINT OF STRUCTURE WALL PENETRATION. WATERSTOP SHALL BE PVC CONCRETE MANHOLE ADAPTER (4" THROUGH 8" PIPE) OR LARGE DIAMETER WATERSTOP AS MANUFACTURED BY FERNCO, OR EQUIVALENT APPROVED BY THE ENGINEER.
- 5. GRATED CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLAN DETAIL SHOWN HEREON.
- 6. WITHIN TEN (10) WORKING DAYS OF COMPLETION OF THE STORM DRAIN SYSTEM AND BEFORE CONSTRUCTION OF PAVEMENT, WAI KWAYS AND OTHER PERMANENT SURFACE IMPROVEMENTS CONTRACTOR SHALL ENSURE TOP OF GRATE, COVER, INLET AND OUTLET INVERT ELEVATIONS OF ALL STORM DRAIN STRUCTURES MATCH PLANS AND ARE ACCURATE TO 0.01 FEET.

WATER NOTES:

- 1. ALL WATER LINE MATERIALS AND CONSTRUCTION, INCLUDING SERVICE LATERALS, SHALL COMPLY WITH THE UNIFORM PLUMBING CODE, CURRENT EDITION, AND WITH THE GOVERNING AGENCY CODE
- 2. ALL WATER LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF CRITERIA FOR SEPARATION OF WATER MAINS AND SANITARY SEWERS.
- 3. PVC C900 SDR 21 PIPE SHALL CONFORM TO ASTM D 1784 FOR GASKET. GASKET JOINTS SHALL CONFORM TO ASTM F 477.
- 4. DI PIPE SHALL BE RATED TO 150 PSI MINIMUM AND SHALL CONFORM TO AWWA C150-08.
- 5. CONTRACTOR SHALL MAINTAIN RECORDS OF THE EXACT LOCATIONS OF ALL WATER VALVES, METERS, MAIN STUBS, AND LATERALS FOR THE PURPOSE OF PROVIDING A BASIS FOR CONSTRUCTION-RECORD DRAWINGS. SAID RECORD SHALL BE DELIVERED TO THE DEVELOPER'S ENGINEER PRIOR TO ACCEPTANCE OF THE WORK BY THE GOVERNING AGENCY.
- 6. ALL WATER METER BOXES AND VALVE BOX RIMS SHALL BE ADJUSTED TO FINISH GRADE IN PAVED
- 7. UPON COMPLETION OF WATER MAINS, THE CONTRACTOR SHALL HYDROSTATICALLY TEST BETWEEN EACH MAIN LINE VALVE PER ASTM F2164 AND AWWA M55. THE CONTRACTOR SHALL FURNISH A SUITABLE TEST PUMP, MEASURING DEVICE, MATERIALS, LABOR, EQUIPMENT, ETC., TO PERFORM THE TEST TO THE SATISFACTION OF THE ENGINEER. THE LINE SHALL BE FILLED SLOWLY, WITH CARE BEING TAKEN TO INSURE COMPLETE REMOVAL OF AIR FROM THE LINE. AFTER THE LINE HAS BEEN FILLED. EACH PORTION BETWEEN VALVES SHALL BE HYDROSTATICALLY TESTED TO 150 PSI AND MAINTAINED FOR A PERIOD OF THREE (3) HOURS. ANY VISIBLE LEAKAGE SHALL BE REPAIRED TO A WATER-TIGHT CONDITION. DEFECTIVE MATERIALS DISCLOSED BY THE TEST SHALL BE REPLACED AND THE TEST REPEATED
- 8. BEFORE BEING CHLORINATED, THE ENTIRE LINE SHALL BE THOROUGHLY FLUSHED PER AWWA C651 AND MDH REGULATIONS. THE FLUSHING SHALL BE DONE AFTER THE PRESSURE TESTS ON THE LINE ARE MADE.
- 9. THE LINE SHALL BE CHLORINATED IN ACCORDANCE WITH AWWA STANDARD C 601-54, AWWA C651, AND MDH REGULATIONS. THE CHLORINATING AGENT SHALL BE APPLIED AT THE BEGINNING OF THE SECTION ADJACENT TO THE FEEDER CONNECTION AND SHALL BE INJECTED THROUGH A CORPORATION COCK. HYDRANT OR OTHER CONNECTION INSURING TREATMENT OF THE ENTIRE LINE MAINS PREVIOUSLY FILLED SHALL BE TREATED TO A CONCENTRATED DOSAGE AT INTERVALS ALONG THE LINE AND RETAINED FOR A PERIOD OF TWENTY-FOUR (24) HOURS OR MORE. A RESIDUAL OF NOT LESS THAN 10 PPM SHALL BE PRODUCED IN ALL PARTS OF THE LINE. DURING THE CHLORINATING PROCESS ALL VALVES AND ACCESSORIES SHALL BE OPERATED BY THE CONTRACTOR. AFTER CHLORINATION THE WATER SHALL BE FLUSHED FROM THE LINE PER AWWA C655. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COLLECT THE SAMPLES AND TO HAVE THE TEST CONDUCTED BY THE APPROVED LABORATORY, AND TO PROVIDE A CERTIFICATE OF SAME. A SAMPLE SHOWING "NO COLIFORM PRESENT" SHALL CONSTITUTE A SATISFACTORY SAMPLE WHEN ANALYZED BY THE MISSISSIPPI STATE DEPARTMENT OF HEALTH ENVIRONMENTAL LABORATORY OR A LABORATORY CERTIFIED BY THE MSDH.

DEMOLITION NOTES:

- THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY THE AVAILABLE RECORDS PROVIDED. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATION OF SAID LINES, NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO WORK OR POTHOLE TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OR PROTECTION OF ALL EXISTING UTILITY LINES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND OR BELOW GROUND UNLESS NOTED OTHERWISE, ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND/OR STATE LAWS AT NO COST TO THE OWNER.
- 3. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS
- 4. ALL JOIN LINES SHALL BE SAWCUT ON A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING, AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO JOINING.
- 5. ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENTS INCLUDING BUT NOT LIMITED TO BUILDING FOUNDATIONS UTILITIES APPURTENANCES TREES SIGNS, STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS NOTED OTHERWISE HEREIN, OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- 6. THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING PAVING IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL REMOVED MATERIALS, AND ALL ASSOCIATED COSTS.

CONCRETE PAVEMENT AND APPURTENANT CONCRETE NOTES:

- UNLESS MODIFIED OR OTHERWISE SPECIFIED BY THE CONSTRUCTION NOTES THAT FOLLOW HEREON INCLUDING THOSE UNDER SEPARATE HEADINGS, PRIVATE ROADWAY MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), CURRENT EDITION PER LOCATION.
- COMPACTION OF FILL, SUBGRADE AND BASE COURSES AS WELL AS ALL TRENCH BEDDING AND BACKFILL SHALL BE OBSERVED AND TESTED FOR COMPLIANCE WITH APPLICABLE REQUIREMENTS BY THE GEOTECHNICAL ENGINEER.
- CONCRETE FOR DRIVEWAYS, DRAINAGE STRUCTURES, AND PAVEMENT SHALL BE RATED TO 4000 PSI. REINFORCING STEEL SHALL BE GRADE 60 BILLET STEEL CONFORMING TO ASTM A 615. STEEL BENDING PROCESS SHALL CONFORM TO THE REQUIREMENTS OF MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE. BENDING OR STRAIGHTENING SHALL BE ACCOMPLISHED SO THAT THE STEEL WILL NOT BE DAMAGED. KINKED BARS SHALL NOT BE USED.
- 5. JOINTS IN CONCRETE PAVEMENT A. WEAKENED PLANE CRACK CONTROL (CONTRACTION) JOINTS SHALL BE CONSTRUCTED AT REGULAR INTERVALS NOT EXCEEDING 10-FEET EACH WAY (LONGITUDINAL AND TRANSVERSE) AND AT ADDITIONAL LOCATIONS AS MAY BE CALLED FOR IN THE FIELD. JOINTS SHALL BE CONSTRUCTED PER SUBSECTION 303-5.4.2 OF THE SSPWC AS MODIFIED BY THE PLAN DETAILS AND THESE NOTES. REINFORCEMENT SHALL BE CONTINUOUS THROUGH JOINTS. DEPTH OF JOINTS SHALL BE 1/4 SLAB THICKNESS + 1/2-INCH (I.E., 2-INCHES FOR 6-INCH SLAB), JOINTS SHALL BE CONSTRUCTED BY SAWCUTTING GROOVES AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT RAVELING (USUALLY 4 TO 24 HOURS AFTER PLACEMENT). JOINTS SHALL BE FILLED WITH JOINT SEALANT (SIKAFLEX-2CNS OR EQUIVALENT, COLOR LIMESTONE GRAY) AS SOON AFTER COMPLETION OF THE CURING PERIOD AS IS FEASIBLE AND BEFORE PAVEMENT IS OPENED TO TRAFFIC. JOINTS SHALL BE CLEANED OF ALL FOREIGN MATERIAL, INCLUDING MEMBRANE CURING COMPOUNDS, AND SHALL BE SURFACE-DRY WHEN SEALANT IS INSTALLED. JOINT LOCATIONS SHALL BE ADJUSTED AS NECESSARY TO ALIGN WITH THOSE ALREADY CONSTRUCTED IN EXISTING ADJACENT (CONTIGUOUS) FEATURES SUCH AS CURBS AND GUTTERS. ALONG CURVES, TRANSVERSE JOINTS SHALL BE RADIAL.
- B. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS CALLED FOR ON THE PLANS. JOINTS SHALL BE CONSTRUCTED PER SUBSECTION 303-5.4.2 AS MODIFIED BY THE PLAN DETAILS AND THESE NOTES. JOINTS SHALL BE CONSTRUCTED 1/2-INCH WIDE USING ONE PIECE OF PREFORMED JOINT FILLER INSTALLED FROM BOTTOM OF SLAB TO WITHIN 1" OF CONCRETE SURFACE. THE RESULTING RESERVOIR SHALL BE FILLED WITH JOINT SEALANT TO WITHIN 1/4" OF CONCRETE SURFACE AS SOON AFTER COMPLETION OF THE CURING PERIOD AS IS FEASIBLE AND BEFORE PAVEMENT IS OPENED TO TRAFFIC. JOINTS SHALL BE CLEANED OF ALL FOREIGN MATERIAL, INCLUDING MEMBRANE CURING COMPOUND, AND SHALL BE SURFACE-DRY WHEN SEALANT IS INSTALLED. REINFORCING BARS SHALL BE INTERRUPTED 3 INCHES CLEAR OF EXPANSION JOINTS AND MINIMUM 14-INCH LONG SMOOTH DOWELS INSTALLED ACROSS, AND CENTERED ON, THE JOINT. DOWEL DIAMETER SHALL BE 1/8 SLAB THICKNESS (I.E., 1" FOR 8" SLAB, 3/4" FOR 6" SLAB). ONE-HALF (ONE END) OF THE DOWEL SHALL BE INSTALLED WITHIN A "SPEED DOWEL" TUBE WITH A 1-INCH GAP BETWEEN THE END OF THE DOWEL AND THE SEALED END OF THE TUBE. DOWELS SHALL BE INSTALLED AT 12 INCHES ON CENTER HORIZONTALLY, CENTERED IN THE SLAB VERTICALLY, AND A MINIMUM OF 3 INCHES CLEAR OF ANY REBAR. JOINT LOCATIONS SHALL BE ADJUSTED AS NECESSARY TO ALIGN WITH THOSE ALREADY CONSTRUCTED IN EXISTING ADJACENT (CONTIGUOUS) FEATURES SUCH AS CURBS AND GUTTERS. ALONG CURVES. TRANSVERSE JOINTS SHALL BE RADIAL. ICE WITH ACI 301 PROVIDE FINE
- APPLY BROOM FINISH TO ALL FLATWORK SURFACES IN CON OR MEDIUM-COARSE TEXTURE AND COARSENESS 14. ALL EXISTING AND PROPOSED VALVE AND UTILITY BOXES AND MANHOLE FRAMES AND COVERS SHALL BE ADJUSTED TO FINISH GRADE.
- 15. AFTER CONSTRUCTION OF CONCRETE PAVEMENT AND APPURTENANT CONCRETE FEATURES, A FLOOD TEST SHALL BE CONDUCTED TO REVIEW SURFACE DRAINAGE, AS FOLLOWS: A. WATER SHALL BE SUPPLIED AND DISCHARGED IN SUFFICIENT QUANTITY TO COMPLETELY WET AND COVER ALL PAVEMENT AND CONCRETE GUTTER AREAS; THE OUTLINE LIMITS OF RESIDUAL
- STANDING/PONDED WATER SHALL THEN BE MARKED B. CONCRETE IMPROVEMENTS SHALL BE REMOVED AND REPLACED, AT NO ADDITIONAL COST TO THE OWNER, AS NECESSARY TO PROVIDE POSITIVE SURFACE DRAINAGE AND TO PREVENT PONDING OF WATER ON PAVEMENT SURFACES AND IN GUTTERS C. ADDITIONAL FLOOD TESTING SHALL BE CONDUCTED TO CONFIRM SUCCESS OF CORRECTIVE
- MFASURFS D. WHERE SAWCUT LINE IS CONSTRUCTED ALONG CONFORM LINE WITH EXISTING A.C. PAVEMENT, IT IS CONTRACTOR'S RESPONSIBILITY TO PROTECT THE INTEGRITY OF THE PAVEMENT ALONG AND BEHIND THE SAWCUT LINE DURING CONSTRUCTION: IF THIS PAVEMENT IS BROKEN-OFF OR OTHERWISE DAMAGED BEFORE NEW PAVEMENT IS PLACED. CONTRACTOR SHALL SAWCUT A NEW CONFORM LINE PARALLEL WITH, FULL LENGTH OF, AND SUFFICIENT DISTANCE BEHIND ORIGINAL SAWCUT SO AS TO REMOVE DAMAGED PAVEMENT AND/OR IRREGULARITY ALONG THE CONFORM LINE

USE OF PLANS:

THIS DRAWING IS PROVIDED IN AN ELECTRONIC FORMAT AS A COURTESY, IF REQUESTED BY THE USER. THE DELIVERY OF THE ELECTRONIC FILE DOES NOT CONSTITUTE THE DELIVERY OF OUR PROFESSIONAL WORK PRODUCT. THE SIGNED HARD COPY PREPARED FOR THE PROJECT CONSTITUTES OUR PROFESSIONAL WORK PRODUCT AND THE HARD COPY MUST BE REFERRED TO FOR THE CORRECT DESIGN INFORMATION. THESE PLANS HAVE BEEN PREPARED SOLELY FOR USE FOR THE PROJECT SCOPE AND SITE SPECIFICALLY IDENTIFIED HEREON AT THE TIME THESE PLANS ARE SIGNED. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, USE OF ANY PART OF THESE PLANS, INCLUDING ANY NOTE OR DETAIL, FOR ANY UNAPPROVED OR REVISED PROJECT SCOPE. OR FOR ANY OTHER PROJECT AT THIS OR ANY OTHER SITE. USER AGREES TO INDEMNIFY AND HOLD HARMLESS ASHLEY & VANCE FOR ALL COSTS AND DAMAGES IF USED.

USE OF ELECTRONIC INFORMATION:

ELECTRONIC INFORMATION MAY BE PROVIDED BY THE ENGINEER FOR CONVENIENCE; UNDER NO CIRCUMSTANCES SHALL DELIVERY OF ELECTRONIC FILES FOR USE BY OTHERS BE DEEMED A SALE BY THE ENGINEER AND THE ENGINEER MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL THE ENGINEER BE LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES AS A RESULT OF THE USE OR REUSE OF THE ELECTRONIC FILES BY OTHERS.

ELECTRONIC INFORMATION IS INTENDED TO PROVIDE INFORMATION SUPPLEMENTAL AND SUBORDINATE TO THE CONSTRUCTION CONTRACT DOCUMENTS. LAYOUT AND CONSTRUCTION OF PROJECT ELEMENTS SHALL BE BASED ON DIMENSIONS AND INFORMATION INCLUDED ON THE SIGNED AND SEALED CONSTRUCTION CONTRACT DOCUMENTS WHICH SHALL CONTROL OVER FLECTRONIC INFORMATION USER IS RESPONSIBLE FOR CONFIRMING LOCATION OF PROPOSED IMPROVEMENTS BASED ON DIMENSIONS AND INFORMATION INCLUDED ON THE CONSTRUCTION CONTRACT DOCUMENTS; INCONSISTENCIES BETWEEN THE ELECTRONIC INFORMATION AND THE CONSTRUCTION CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION.

PROJECT ELEMENTS SUCH AS MANHOLES, CATCH BASINS, UTILITY VAULTS, VALVE ASSEMBLIES, STAIRS, RAMPS, WALLS, ETC, ARE SHOWN SCHEMATICALLY IN THE ELECTRONIC INFORMATION AND CONSTRUCTION OF THESE ELEMENTS SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION NOTES AND DETAILS PRESENTED OR REFERENCED IN THE SIGNED AND SEALED CONSTRUCTION CONTACT DOCUMENTS. IMPROVEMENTS CONSTRUCTED BASED ON FLECTRONIC INFORMATION AND IN CONFLICT WITH THE DRAWING DIMENSIONS DETAILS, AND THE CONSTRUCTION CONTRACT DOCUMENTS SHALL BE REMOVED AND CONSTRUCTED IN THE PROPER LOCATION AND DIMENSIONS AT CONTRACTOR'S SOLE EXPENSE.

DIGITAL DRAWINGS ARE TYPICALLY A COMPILATION OF DRAWINGS FROM A NUMBER OF SOURCES AND, AS SUCH, THERE IS INFORMATION IN THE ELECTRONIC FILE ISSUED BY THE ENGINEER THAT WAS NOT DEVELOPED BY THE ENGINEER AND IS NOT AUTHORIZED BY THE ENGINEER FOR USE BY OTHERS. FLECTRONIC INFORMATION PROVIDED BY THE ENGINEER SHALL ONLY BE APPLICABLE FOR IMPROVEMENTS DESIGNED BY THE ENGINEER AND WHICH ARE SPECIFICALLY DESIGNATED BY CONSTRUCTION NOTES AND/OR DETAILS ON THE SIGNED AND SEALED CONTRACT DOCUMENTS.

IF DIGITAL FILES ARE OBTAINED WITH THE INTENT TO USE THEM FOR PROJECT STAKING, THEY SHALL ONLY BE USED BY A QUALIFIED ENGINEER OR LAND SURVEYOR. DIGITAL INFORMATION SHALL ONLY BE USED FOR STAKING HORIZONTAL LOCATION OF PROPOSED IMPROVEMENTS AFTER IT HAS BEEN CONFIRMED WITH THE SIGNED AND SEALED CONSTRUCTION CONTRACT DOCUMENTS

THE DIGITAL DRAWINGS ARE NOT INTENDED TO BE USED DIRECTLY FOR CONTROL OF CONTRACTOR'S GRADING OPERATIONS WITHOUT STAKING BY ENGINEER OR LAND SURVEYOR. THE INTERSECTION OF PROPOSED CUT AND FILL SLOPES WITH EXISTING GRADE IS APPROXIMATE WHERE SHOWN ON THE DRAWINGS AND SHALL BE CONFIRMED BY FIELD STAKING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT SLOPES IN CONFORMANCE WITH THE SPECIFIED AND DETAILED REQUIREMENTS CONTAINED IN THE CONTRACT DOCUMENTS.

ith these plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: TATE DESCRIPTION DESCRIPTION	D:								
vart, is prohibited. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual contact wi			ENGINEERING, INC	toral worker M CHI	San Luis Ohiono CA 03401		CIVIL • STRUCTURAL www.ashleyvance.com			
they were prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in pa			NdOO					STENNIS SPACE CENTER MISSISSIPPI		
e plans and specifications shall be restricted to the original site for which the	SHEET NC PRINT DRWN CHKD SCALE JOB NG SHEET	DATI BY: :: 0: NO:	_E: ES	5		2/1 PEF	R F 21	200 BF BF 155	25 3J 3J 24	

SITE CONSTRUCTION NOTES:

- (1) CONSTRUCT ROAD BASE SECTION PER DETAIL X, SHEET C-4.1.
- 2 CONSTRUCT CONCRETE PAVEMENT SECTION PER DETAIL X, SHEET C-4.1.
- 3 CONSTRUCT TRENWA UTILITY TRENCH PER DETAIL X, SHEET C-4.1.
- (4) CONSTRUCT SLOPE CAP PER DETAIL X, SHEET C-4.1.

WATER CONSTRUCTION NOTES:

- (W1) CONSTRUCT 12-INCH CONNECTION TO EXITING WATER MAIN.
- W2 CONSTRUCT 12-INCH C900 PVC WATER LINE PER DETAIL 10, SHEET C-4.1. THRUST BLOCKS PER DETAIL 13, SHEET C-4.1.
- (W3) CONSTRUCT 12-INCH CONTROL VALVE PER DETAIL 11, SHEET C-4.1.
- (W4) CONSTRUCT FIRE HYDRANT PER DETAIL 12, SHEET C-4.1.
- (W5) CONSTRUCT 12-INCH RISER PER DETAIL 13, SHEET C-4.1.

ELECTRICAL CONSTRUCTION NOTES:

- E1 CONSTRUCT ELECTRICAL SERVICE CONDUIT PER ELECTRICAL PLANS.
- E2 CONSTRUCT FIBER SERVICE CONDUIT PER ELECTRICAL PLANS.
- CONSTRUCT JOINT ELECTRICAL / COMMUNICATION MANHOLE PER ELECTRICAL PLANS.

HORIZONTAL SCALE: 1" = 30

30

30

(E4) CONSTRUCT TRANSFORMER AND PAD PER ELECTRICAL PLANS.

GAS CONSTRUCTION NOTES:

- GN CONSTRUCT GN GAS LINE ON ELECTRICAL TRAY.
- (IN) CONSTRUCT LN GAS LINE ON ELECTRICAL TRAY.
- (HE) CONSTRUCT HE GAS LINE ON ELECTRICAL TRAY.

x with these plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: REVISIONS: REV. DATE DESCRIPTION STAME:	
t, is prohibited. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual contact	ASHEVANCE ENGINEERING, INC	1413 Monterey Street 1413 Monterey Street San Luis Obispo, CA 93401 (805) 545-0010 CIVIL • STRUCTURAL www.ashleyvance.com
where prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in part,	TERRAN R TEST FACILITY COPV	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
use of these plans and specifications shall be restricted to the original site for which they wer	E SHEET TITLE: GRADINO PRINT DATE: DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NO: CHEET NO:	G PLAN 02/18/2025 BRJ BRJ PER PLAN 211524

SITE CONSTRUCTION NOTES:

- () CONSTRUCT ROAD BASE SECTION PER DETAIL X, SHEET C-4.1.
- 2 CONSTRUCT CONCRETE PAVEMENT SECTION PER DETAIL X, SHEET C-4.1.
- 3 CONSTRUCT TRENWA UTILITY TRENCH PER DETAIL X, SHEET C-4.1.
- (4) CONSTRUCT SLOPE CAP PER DETAIL X, SHEET C-4.1.

WATER CONSTRUCTION NOTES:

- (W1) CONSTRUCT 12-INCH CONNECTION TO EXITING WATER MAIN.
- W2 CONSTRUCT 12-INCH C900 PVC WATER LINE PER DETAIL 10, SHEET C-4.1. THRUST BLOCKS PER DETAIL 13, SHEET C-4.1.
- W3 CONSTRUCT 12-INCH CONTROL VALVE PER DETAIL 11, SHEET C-4.1.
- W4 CONSTRUCT FIRE HYDRANT PER DETAIL 12, SHEET C-4.1.
- (W5) CONSTRUCT 12-INCH RISER PER DETAIL 13, SHEET C-4.1.

ELECTRICAL CONSTRUCTION NOTES:

- E1 CONSTRUCT ELECTRICAL SERVICE CONDUIT PER ELECTRICAL PLANS.
- E2 CONSTRUCT FIBER SERVICE CONDUIT PER ELECTRICAL PLANS.
- CONSTRUCT JOINT ELECTRICAL / COMMUNICATION MANHOLE PER ELECTRICAL PLANS.

HORIZONTAL SCALE: 1" = 30' 30 0

60

E4 CONSTRUCT TRANSFORMER AND PAD PER ELECTRICAL PLANS.

GAS CONSTRUCTION NOTES:

- GN CONSTRUCT GN GAS LINE ON ELECTRICAL TRAY.
- LN CONSTRUCT LN GAS LINE ON ELECTRICAL TRAY.
- (HE) CONSTRUCT HE GAS LINE ON ELECTRICAL TRAY.

x with these plans and specifications shall constitute prima facie evidence of the acceptance of these restrictions.	REVISIONS: REVISIONS: REV. DATE DESCRIPTION STAME:	
t, is prohibited. Title to these plans and specifications remain with Ashley & Vance Engineering Inc. without prejudice. Visual contact	ASHEVANCE ENGINEERING, INC	1413 Monterey Street 1413 Monterey Street San Luis Obispo, CA 93401 (805) 545-0010 CIVIL • STRUCTURAL www.ashleyvance.com
where prepared and publication thereof is expressly limited to such use. Reproduction or publication by any method, in whole or in part,	TERRAN R TEST FACILITY COPV	RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI
use of these plans and specifications shall be restricted to the original site for which they wer	E SHEET TITLE: GRADINO PRINT DATE: DRWN BY: CHKD BY: SCALE: JOB NO: SHEET NO: CHEET NO:	G PLAN 02/18/2025 BRJ BRJ PER PLAN 211524

ALL EXISTING UTILITIES SHOWN ARE BASED ON THE BEST KNOWLEDGE AVAILABLE. CONTRACTOR TO POTHOLE ALL POINTS OF CONNECTION AND VERIFY ALL CLEARANCES. MATERIAL DEPTH AND LOCATION SHALL BE IDENTIFIED BY CONTRACTOR. IF THERE ARE ANY DIFFERENCES FROM PLAN WITH ANY OF THESE ITEMS, ENGINEER OF WORK SHALL BE NOTIFIED IMMEDIATELY. <u>BMP SELECTION & LEGEND:</u> THE FOLLOWING BMPS SHALL BE USED IN THE CONTRACTOR STAGING AREA:	
BMP SELECTION & LEGEND: THE FOLLOWING BMPS SHALL BE USED IN THE CONTRACTOR STAGING AREA: Image: Contractor staging area: Image: Contractor staging area:	
THE FOLLOWING BMPS SHALL BE USED IN THE CONTRACTOR STAGING AREA: Image: Contract of the contract	
(CWA) CONCRETE WASHOUT AREA PER DETAIL 1, SHEET C-5.2.	
SP STOCKPILE MANAGEMENT	
SSA STABILIZED STAGING AREA	
THE FOLLOWING BMPS ARE SPECIFIED ON THIS PLAN AND ARE TO BE INSTALLED OR	
$\frac{\text{CONSTRUCTED PER GESC STANDARD PLANS AND DETAILS:}}{\text{(VTC)}}$	
CD CHECK DAM PER DETAIL 3 SHEET C-5 2	
Provide The to the part and generations errors with Anity A force Expressing Inc. without project (A force Expressing Inc. Without Project (A force Expressing Inc. Without Project (A force Expressing Inc. Barry 100, 10, 10, 10, 10, 10, 10, 10, 10, 10	CIVIL • STRUCTURAL www.ashleyvance.com
APPROACH AND A PARAMAN AND AND A PARAMAN AND AND A PARAMAN AND AND A PARAMAN AND AND AND AND A PARAMAN AND AND AND AND AND AND AND AND AND A	STENNIS SPACE CENTER, MISSISSIPPI
HORIZONTAL SCALE: 1" = 80'	J LAN 18/2025 BRJ R PLAN 211524

View of Terran R Testing Facility COPV Project Location on the Stennis Space Center. Taken from 3/21/19 Google Earth Image.

IMPACTED WETLAND AREA (1.66 ACRES)

COPV TEST FACILITY EXHIBIT 2

RELATIVITY SPACE INC. STENNIS SPACE CENTER, MISSISSIPPI

