NOTES:
1. SPECIFIED SHOWN DO NOT SUPPORT TO CONSTRUCT OR IMPLEMENT ALL USES OF ZONING OR BUILDING CODES OR COUNTY ORDINANCES. EXISTING LAND USES AND IMPROVEMENTS ONLY.
   THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES CONTACTS. ALL BELOW GRADE SHALL BE VERIFIED PRIOR TO ANY CONSTRUCTION.
2. PROPER W.L. INFORMATION MAY BE DETERMINED THROUGH EXISTING DRAINAGE MAPS, FREE CAPITOL PLAZA CORPORATION L ATERAL ON FILE OR AS PREPARED BY CIVIL ENGINEERING ASSOCIATES, INC. -- THIS PLAN IS NOT A SURVEY PLAN AND IS NOT INTENDED TO BE USED AS ONE.
3. SITE INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY CIVIL ENGINEERING ASSOCIATES, INC., SEPTEMBER 2018.
   ALL DATA ARE APPROXIMATE AND ARE INTENDED TO APPEAR NEAR EAST SIDE OF STREET.
4. APPROXIMATE BOUNDARY LOCATION OFF-X TRANSFORMER, ELECTRICAL, HEPHERSON ON DIGITALIZED POINTS.

LEGEND
- APPROXIMATE PROPERTY LINE
- APPROXIMATE STREET LINE
- EXISTING CONTOUR
- EXISTING IMPACT
- EXISTING GRAVITY SEWER
- EXISTING ELECTRIC
- EXISTING ELECTRIC
- existing water
- EXISTING COMMUNICATIONS
- EXISTING DRAINAGE TELEPHONE
- APPROXIMATE LOCATION OF EXISTING TRANSFORMER
- APPROXIMATE LOCATION OF EXISTING POWER TRANSFORMER
- APPROXIMATE LOCATION OF EXISTING EXISTING WATER OR EXISTING
- EXISTING DRAINAGE TELEPHONE
- EXISTING GRASS
- EXISTING Stockade FENCE
- EXISTING SIGN
- EXISTING PUMP STATION
- EXISTING DAM
- EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- EXISTING STREET MANHOLE
- EXISTING STORM SEWER
- EXISTING HYDRANT
- EXISTING CATCH BASIN
- EXISTING LID
- EXISTING DUMPSTER
- EXISTING stockade FENCE
- EXISTING CAPITAL PLAZA HOTEL
- EXISTING CB
- APPX. EXIST.
- EXISTING CHURCH STATION
- EXISTING CAPITAL PLAZA HOTEL
- EXISTING CB
- APPX. EXIST.
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- EXISTING CHURCH STATION
- EXISTING CAPITAL PLAZA HOTEL
- EXISTING CB
- APPX. EXIST.
- EXISTING CHURCH STATION
- EXISTING CAPITAL PLAZA HOTEL
The 'desired stopping point' is the location based on site conditions that best allows the stopped vehicle to view the approaching traffic.

*THE DESIRED STOPPING POINT* IS THE LOCATION BASED ON SITE CONDITIONS THAT BEST ALLOWS THE STOPPED VEHICLE TO VIEW THE IMPENDING TRAFFIC.
EXISTING GRADE

* Hay bales must not be used as sediment barriers due to their

Mark the site boundaries to identify the limits of construction. Delineating

Introduction

Requirements:

Purpose:

Rock Size:

How to install

install a stabilized construction entrance before construction begins.

Requirements:

Purpose:

before beginning work in a new section of the site.

Requirements:

Purpose:

A stabilized construction entrance helps remove mud from vehicle

Where to place:

temporary skidsteer or tractor to prevent

Silt fence must be installed:

Silt fence or hay

· Drive stakes until 16 inches of fabric is in trench

· Install multiple rows of silt fence on long hills to break up flow.

· Maximum drainage area is ¼ acre for 100 feet of silt fence.

· Stone check dams reduce erosion in drainage channels by slowing

· Silt fence is placed in the lowest flow channel. Stone check dams

· It is the owner’s responsibility to have a contractor construct and

· The check dam should be placed 20 – 40 feet back from the

· Seed and mulch berm or cover with erosion control matting

· Stabilize the flow channel with seed and straw mulch or erosion

· Remove any large rocks or debris from the site.

· Where grade exceeds 2% or greater:

· 1. INSTALL MIRIFI ENVIROFENCE, OR APPROVED EQUAL OR AS DETAILED HEREIN.

· 2.限 the amount of disturbed earth to two acres or less at any one

· 3. Drive stakes until 16 inches of fabric is in trench.

· 4. Silt fence or hay bales must not be used as sediment barriers due to their

· 5. Mark Site Boundaries

· 6. Install Silt Fence

· 7. Construct Permanent Controls

· 8. 12. Inspect Your Site

· 9. Winter Stabilization

· 10. Dewatering Activities

· 11. Mulching Rates

· 12. Inspect Your Site

· POST SPACING

· 2% OR GREATER

· REVISED 08/01/2014

· C3.1
**Detectable Warning Details**

1. Detectable Warning Surfaces shall be laid out per FIG. C4.1.
2. Concrete adjacent to all detectable warning surfaces shall have a broom finish.
3. The color of the detectable warning shall provide a visual contrast to the detectable warning surface.
4. Detectable warning surfaces shall be installed in accordance with AWWA M14.
5. The tolerance for detectable warning surfaces shall be ± 0.25".
6. The detectable warning shall be aligned in a square pattern in the predominant direction.

**Detectable Warning Surface**

- Width: 6" min.
- Length: 8" max.
- Bevel: 0.2" minimum base spacing.
- Square pattern in the predominant direction.
- Bevel with a maximum 0.25" vertical change between 0.25" and 0.50".
- Truncated domes shall be aligned on a square pattern, 1.6" min. to 2.4" max. of ramp bearing area.

**Details**

- Ada compliant ramp handrail
- Thrust block details
- Sprinkler backflow prevention detail
- Typical water trench detail

**Notes**

- Thrust block details: Wrenches, 1/2" x 4" round head machine screw (S.S.), spring lock washer (S.S.), 5/16" washer head machine screw (S.S.), cast aluminum post support ASP-1, cast aluminum post adapter ASP-1.

**Architects**

- Rabideau Architects
- 550 Hinesburg Rd., Suite 101
- South Burlington, Vermont 05403

**Contact Information**

- Civil Engineering Associates, Inc.
- 550 Hinesburg Rd., Suite 101
- South Burlington, VT 05403
- P: 802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com
**ELECTRICAL TRENCH - PRIMARY**

- Appropriate Backfill: Thoroughly compacted in 8" lifts
- Telephone Cable: Min. 4" sand or fine gravel on all sides of conduit
- Electrical Conduit: 24" min. and 40" min.

**CONDUIT SHALL BE ENCASED IN A 4" ENVELOPE OF CONCRETE UNDER THE FOLLOWING CONDITIONS:**

A. For installation under the travel portion of the road.
B. Within 10' of water, sewer, gas and drain crossings.

**ELECTRICAL TRENCH - SECONDARY**

- Appropriate Backfill: Thoroughly compacted in 8" lifts
- Telephone Cable: Min. 4" sand or fine gravel on all sides of conduit
- Electrical Conduit: 24" min. and 40" min.

**CONDUIT SHALL BE ENCASED IN A 4" ENVELOPE OF CONCRETE UNDER THE FOLLOWING CONDITIONS:**

A. For installation under the travel portion of the road.
B. Within 10' of water, sewer, gas and drain crossings.

---

**TYPICAL STORM TRENCH**

- Storm Line: See plan for type and size
- Pipe Bedding: Undisturbed soil or rock
- Topsoil, Rake, Seed & Mulch

**NOTES:**

1. Compaction of backfill and bedding shall be a minimum of 90% (95% under roadway surfaces) of maximum dry density determined in the standard Proctor test (ASTM D698).
2. Bedding material shall not be placed on frozen subgrade.
3. Approved backfill shall not contain any stones more than 12" in largest dimension (6" in roadways, 1 1/2" maximum diameter within 24" of the outside of the pipe), or contain any frozen, wet, or organic material.
4. Trenches shall be completely dewatered prior to placing of pipe bedding material and kept dewatered during installation of pipe and backfill.
5. In trenches with unstable materials or high water table, trench bottom shall first be stabilized by placement of filter fabric then crushed stone (3/4" max).
6. The sides of trenches 4' or more in depth entered by personnel shall be sheeted or sloped to the angle of repose as defined by OSHA standards.
7. Bedding material shall consist of crushed stone, gravel, or sand with a maximum size of 3/4". Submit a sample to the engineer for approval.

---

**TYPICAL CATCH BASIN @ CURB**

- HDPE Outlet Pipe (See Plan for Size)
- 6" Min. Crushed Gravel
- Adjust to Grade with Concrete Risers
- Bituminous Concrete Pavement (1/4" / ft. slope min.)
- Set Frame on full mortar bed
- LeBaron LK120 (LK120A for design grades >5%)
- C.I. Grate with 3 flanged frame (or approved equal). Rim to be set 1" below normal cross section elev.
- High Strength Non-Shrink Grout

---

**PRECAST MANHOLE STRUCTURE**

- Cast in place flexible sleeves or approved equal (typ. all pipes)
- Precast Concrete w. Segmented Missle
- Waterproof Joint using C.S. 344 Flexible Joint (or equivalent)
- High Strength Flexible Joint (or equivalent)
- Hard Exterior Curb
- Cast in place flexible sleeves or approved equal (typ. all pipes)
- Precast Manhole Structure cast in place with specific aggregate content
SWR-003 Service Connection - EX

SEWER MAIN

ROTATED AS REQUIRED
4" 22° OR 45° ELBOW

ELEVATION

SEWER SERVICE CONNECTION
- SEE TYPICAL TRENCH FOR BEDDING AND BACKFILL REQUIREMENTS.

( MIN. SLOPE = 1/4" PER FT.)

PLAN AND INSTALL PVC SLOPE AND ELEVATIONS CAP. SEE SITE PLAN FOR SERVICE, CONTINUE AS PER 4" MIN. SDR 35 PVC SEWER

HOST SITE HOLDING TANK (@ EXISTING SEWER MAIN)

REVISED 08/01/2014

STEEL CLAMP
STAINLESS

APPLICATION 5W1591
RESPONSE TO RECESSION MEMO

C4.3

DETAILS

MONTPELIER PARKING GARAGE
STATE STREET
MONTPELIER, VT
7. DC-780 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

5. DC-780 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".

OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.

THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.

1. PLEASE NOTE:

B: STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGE WITH A VIBRATORY COMPACTOR.

D: INITIAL FILL: FILL MATERIAL FOR LAYER 'D'

E: DRAINAGE SAND: PROVIDE 18" LAYER OF FILTER FROM THE 'A' LAYER UP TO THE FOOT (BOTTOM)

FOUNDATION STONE: FILL BELOW CHAMBERS LAYER) TO THE 'D' LAYER ABOVE EMBEDMENT STONE: FILL SURROUNDING THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FROM THE TOP OF THE 'D' LAYER TO THE SUBBASE MAY BE PART OF THE 'D' LAYER STONE ('C' LAYER) TO 24" (600 mm) ABOVE THE

PERIMETER STONE EXCAVATION WALL (SEE NOTE 6)

A-1, A-2-4, A-3

ASTM C-33

20 MIL PVC LINER SUBGRADE SOILS (SEE NOTE 5)

THERMOPLASTIC LINER DETAIL

20,000 lbs (89kN). DYNAMIC FORCE NOT TO EXCEED LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED GRADED MATERIAL AND 95% RELATIVE DENSITY PLATE COMPACT OR ROLL TO ACHIEVE A FLAT MATERIAL OVER THE CHAMBERS IS REACHED.

FOR PROCESSED AGGREGATE MATERIALS.

MATERIAL OVER THE CHAMBERS IS REACHED. FOR PROCESSED AGGREGATE MATERIALS.

AASHTO MATERIAL AASHTO M145 (NOTE 1)

AASHTO M43 (NOTE 1)

AASHTO M43 (NOTE 1)

3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10

3, 357, 4, 467, 5, 56, 57

3, 357, 4, 467, 5, 56, 57

3, 357, 4, 467, 5, 56, 57

51" (1295 mm)

6" (150 mm) MIN

6" (300 mm) TYP

12" (300 mm) MIN

18" (450 mm)

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER

20 MIL PVC LINER
OUTLET CONTROL STRUCTURE

6' DIA. (MIN.)
24" SUMP
CAST-IN-PLACE FLEXIBLE MANHOLE SLEEVES
12" HDPE
INV. 512.1

TOP OF WEIR EL. 515.7
6" UNDERDRAIN INV. 512.1

1" Ø HOLE IN WEIR @ EL. 512.1

ONE WAY VALVE TO PREVENT BACKFLOW FROM FLOODING RIVER

* REFER TO TYPICAL STORM MANHOLE DETAIL FOR MANHOLE CONSTRUCTION

10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
P: 802-864-2323   FAX: 802-864-2271   web: www.cea-vt.com
### Site Specifications

**PART 1 - GENERAL**

1. **PROJECT**
   - Montpelier Parking Garage
   - State Street
   - Montpelier, VT

2. **CONTRACTOR**
   - Civil Engineering Associates, Inc.
   - 10 Mansfield View Lane, South Burlington, VT 05403
   - P: 802-864-2323, F: 802-864-2271, web: www.cea-vt.com

3. **ARCHITECT**
   - Rабидуэ, Пакинг Гарэж
   - 550 Hinesburg Rd., Suite 101
   - South Burlington, Vermont 05403

4. **DATE**
   - 10/19/2018

5. **DECISION**
   - 02/22/19

6. **SITE REVISIONS**
   - DSM Response to Recess Memo Application 5W1591
   - 04/07/20

**PART 2 - PRODUCTS**

<table>
<thead>
<tr>
<th>Material</th>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
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</table>

**PART 3 - SITE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
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</table>

**NOTES**

- Review and update as needed.
- All changes must be documented and signed by the architect.
- Final approval by the owner is required.
- All changes must be implemented before the construction date.

**SITE CONDITIONS**

- Montpelier Parking Garage
- State Street
- Montpelier, VT

**DESIGN**

- Civil Engineering Associates, Inc.

**CONTRACTS**

- Civil Engineering Associates, Inc.

**ARCHITECT**

- Rабидуэ, Пакинг Гарэж

**DATE**

- 10/19/2018

**DECISION**

- 02/22/19

**SITE REVISIONS**

- DSM Response to Recess Memo Application 5W1591
- 04/07/20

**NOTES**

- Review and update as needed.
- All changes must be documented and signed by the architect.
- Final approval by the owner is required.
- All changes must be implemented before the construction date.
1. **Site Specifications**

   2. **Montpelier Parking Garage**

   3. **550 Hinesburg Rd., Suite 101**

   4. **South Burlington, VT 05403**

   5. **Rescue Memos and U.S.**

   6. **Application: 5W1591**

   7. **2/22/19**

   8. **DSM RESPONSE TO RECESS MEMO**

   9. **10/19/18**

   10. **Comments and Recommendations:**

       - Addressed per City Comments.

   11. **AutoCAD Projects:**

       - 18207 - Details & Specs.dwg, 4/7/2020 9:37:18 AM, DWG To PDF.pc3
<table>
<thead>
<tr>
<th>Site Specifications</th>
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<tbody>
<tr>
<td>MONTPELIER PARKING GARAGE</td>
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<tr>
<td>STATE STREET</td>
<td>MONTPELIER, VT</td>
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</table>
# Site Specifications

## Driveway

<table>
<thead>
<tr>
<th>Part</th>
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</thead>
<tbody>
<tr>
<td>1.6</td>
<td>Site grading and drainage should be designed to ensure proper drainage and prevent water pooling.</td>
</tr>
<tr>
<td>2.0</td>
<td>Trees and vegetation should be preserved to the extent possible.</td>
</tr>
<tr>
<td>2.1</td>
<td>All trees and plants shall be protected from damage during construction.</td>
</tr>
</tbody>
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## Sewer and Stormwater Systems

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3.0</td>
<td>Stormwater management plans shall be submitted for review and approval.</td>
</tr>
<tr>
<td>3.1</td>
<td>Detention basins and infiltration ponds shall be designed to meet the requirements of the local wastewater authority.</td>
</tr>
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</table>

## Landscape Design

<table>
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</thead>
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<tr>
<td>4.0</td>
<td>Landscape design shall be consistent with the overall project design.</td>
</tr>
<tr>
<td>4.1</td>
<td>All plant materials shall be selected to be drought-resistant and low-maintenance.</td>
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## Materials and Workmanship

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<tr>
<td>5.0</td>
<td>All materials shall be selected for their durability and compatibility with the site conditions.</td>
</tr>
<tr>
<td>5.1</td>
<td>Masonry and concrete shall be designed to withstand the expected loads and environmental conditions.</td>
</tr>
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## Geotechnical Engineering

- **Driveway:** Site grading and drainage should be designed to ensure proper drainage and prevent water pooling. Trees and vegetation should be preserved to the extent possible. All trees and plants shall be protected from damage during construction.

- **Sewer and Stormwater Systems:** Stormwater management plans shall be submitted for review and approval. Detention basins and infiltration ponds shall be designed to meet the requirements of the local wastewater authority.

- **Landscape Design:** Landscape design shall be consistent with the overall project design. All plant materials shall be selected to be drought-resistant and low-maintenance.

- **Materials and Workmanship:** All materials shall be selected for their durability and compatibility with the site conditions. Masonry and concrete shall be designed to withstand the expected loads and environmental conditions.